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The Railway and Locomotive Historical Society

BULLETIN No. 67

HISTORY
of the
LOCOMOTIVES
of the
READING COMPANY

By GEORGE M. HART



MAY, 1946

**HISTORY OF THE
LOCOMOTIVES**
of the
READING COMPANY

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By GEORGE M. HART

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I sincerely hope that every reader of this publication will take the trouble to read not only these few notes but the text and explanations that accompany the lists. If he fails to do so, I fear the latter will be of little use to him.

The Philadelphia & Reading R. R. ranks as one of the early railroads in this country. Although it is not a large road, as compared with many, it has been an extremely busy road carrying coal from the mines to tidewater. Its locomotive shops at Reading, Pennsylvania have not only kept its locomotives in repair, modernized and rebuilt a great many, but the road, like many others, has built new locomotives in these shops, commencing at a very early date and continuing to recent years. Its motive power has always been distinctive and of great interest.

The problem of presenting this army of locomotives in list form has been carefully studied by the author and your editor. The records of the motive power naturally fall into three divisions; from 1836 to the abolition of names in December, 1872; from that date to the renumbering in 1900 and from that date to the present. The editor knows full well that some of you like to have all of the number ones follow each other in a group, to be followed by number two and so on to the very

end. This plan was considered and discarded—the list would have been nothing short of a Chinese puzzle, it would not have been clear because of the large amount of rebuilding and I don't believe it would have been satisfactory or understandable to you or to anyone else. To those who claim it will be impossible to identify some of their prints, I firmly believe that a study of the many illustrations together with the data furnished in the list should take care of that situation.

The annual reports of the company deserve mention. They rank with those of the Pennsylvania and Louisville & Nashville R. R. reports for detail, not only of operations but for their motive power also. The first detailed list appears in the report for 1845 and the engines are all grouped according to the individual builder with the totals for each. This continues for about a decade and during the Civil War under the column, "Condition and Duty," we find Reading locomotives helping out in the service of the Pennsylvania R. R., Northern Central Ry., Huntington & Broad Top R. R. and others. In 1865 we find the locomotives listed alphabetically according to their names, but in 1872, the last report giving the names of the locomotives, they are listed according to the date they entered service on the Reading R. R. This plan has been followed by the author in his list of locomotives from 1836-1871 since it is the only method that could be used. Such locomotives as were renumbered, the number will be found at the extreme left. Note even that the locomotives of the P. G. & N. were arranged alphabetically, not according to date of construction, on the Reading roster.

Whether there was any attempt to classify the locomotives according to name would be rather difficult to state at this late day. Mr. F. Stewart Graham has suggested the following and it seems reasonable. You may note that the following types carried these names in general:

- 4-4-0 after cities, such as Omaha, Denver, Duluth, etc.
- 4-6-0 after nationalities, such as Siberian, Russian, etc.
- 0-4-0 after small animals, such as Wharf Rat, Mole, etc.
- 0-6-0 after mythical characters, such as Minerva, Apollo, etc.
- 0-8-0 after states, such as Idaho, Colorado, etc.

With the use of numbers, numerical sequence was followed in the reports and has, of course been followed in the two other lists. This has been strictly adhered to in the 1871-1900 roster but in the 1900-1944 roster, in the lower numbers, where large groups of new locomotives, such as the Pacifics, replaced older engines, these new locomotives have been listed, in a block at the end of the replacement. This was done in order that the roster would be clear and, since it applies to only the lower numbers of the present series, it should present no great difficulty, though we regret the necessity of breaking the numerical sequence.

The renumbering from one group to another has been carefully indicated so that there should be no difficulty in following the locomotives through to their final disposition, and, where no disposition is given—either scrapped, retired or sold, the locomotive was in service at the time this material was prepared—Dec. 31, 1944. It is hoped that these notes, together with those of the author that preface each list, will be

carefully observed, they may save you some embarrassment in your search for data. Through the foresight and generosity of the management, three of the early types of locomotives have been preserved. It may be wishful thinking on the part of the Editor, but it is most unfortunate that none of the three were built in the Reading Shops and it seems most unfortunate that one of the few remaining 4-4-0 or 4-4-2 types cannot be preserved for this purpose.

For a few years it was the good fortune of the writer to live in Philadelphia and many a visit was paid to the Reading terminal at Kaighn's Point, Camden. At that time the Atlantic type was in its glory and on Saturday afternoons and Sunday mornings, in the summer time, trains for Atlantic City and Sea Isle City went out in sections. Those "long legged" Atlantics, with their 80", 84 $\frac{1}{4}$ " or 86" drivers, according to class, were of interest to watch for they were travelling much faster than one might suspect and a ride behind them, at any time, was well worth the time and money. Nearly all are gone, now, but they were kept as clean as cotton waste and "elbow grease" would make them and with the sun striking the high points, their outside valve gear together with their clean train strung out behind them, they made an unforgettable sight.

Preface

This history of Reading locomotives does not pretend to be all-inclusive, in fact, it may be considered the beginning of a comprehensive descriptive history. The object of present research was to make the roster entries as complete and accurate as possible, and for them to serve as a guide and check list suitable for various uses. The brief histories of the three periods of Reading locomotive development, are an evaluation of the roster with added detail.

Other explanations are necessary in order to clearly understand the outline and contents of the roster. First, this list does not attempt to record locomotives that existed on lines before they were absorbed by the Reading, unless the locomotives were placed in the Reading classification. An acquired lines roster is a subject for continued research and the author's notes were considered too incomplete to incorporate now. Thus, some readers will miss such familiar historic locomotives like *Old Ironsides*, Baldwin construction #1, built for the Philadelphia, Germantown & Norristown R. R.

Second, although the rosters have been checked with many records; the list will probably contain some errors. The reader or student of historic locomotive research is cautioned, however, to expect some of the figures given to be at variance with his own information. Unless this printed record is in error, the explanation is, as far as possible the figures that appear are those applying to the locomotive as originally built or emerging from the shops—rebuilt. Minor changes in boiler pressure, weight, cylinders and drivers are not recorded unless the locomotive(s) was rebuilt or underwent some major change. These

variances will be greater, generally speaking, depending upon the age of the locomotive. This rule applies in the 1871-1900 and 1900-1944 group rosters and the numbering of 1871 and 1900 does not influence these figures.

Third, the term "rebuilt" by the Philadelphia and Reading or the Baldwin Locomotive Works is used in the broadest sense. Thus, the locomotive shown as rebuilt may represent a change ranging from a new boiler, new firebox, addition of superheater units, new valve gear to simply a change in the diameter of the cylinders, either independently or all at the same time.

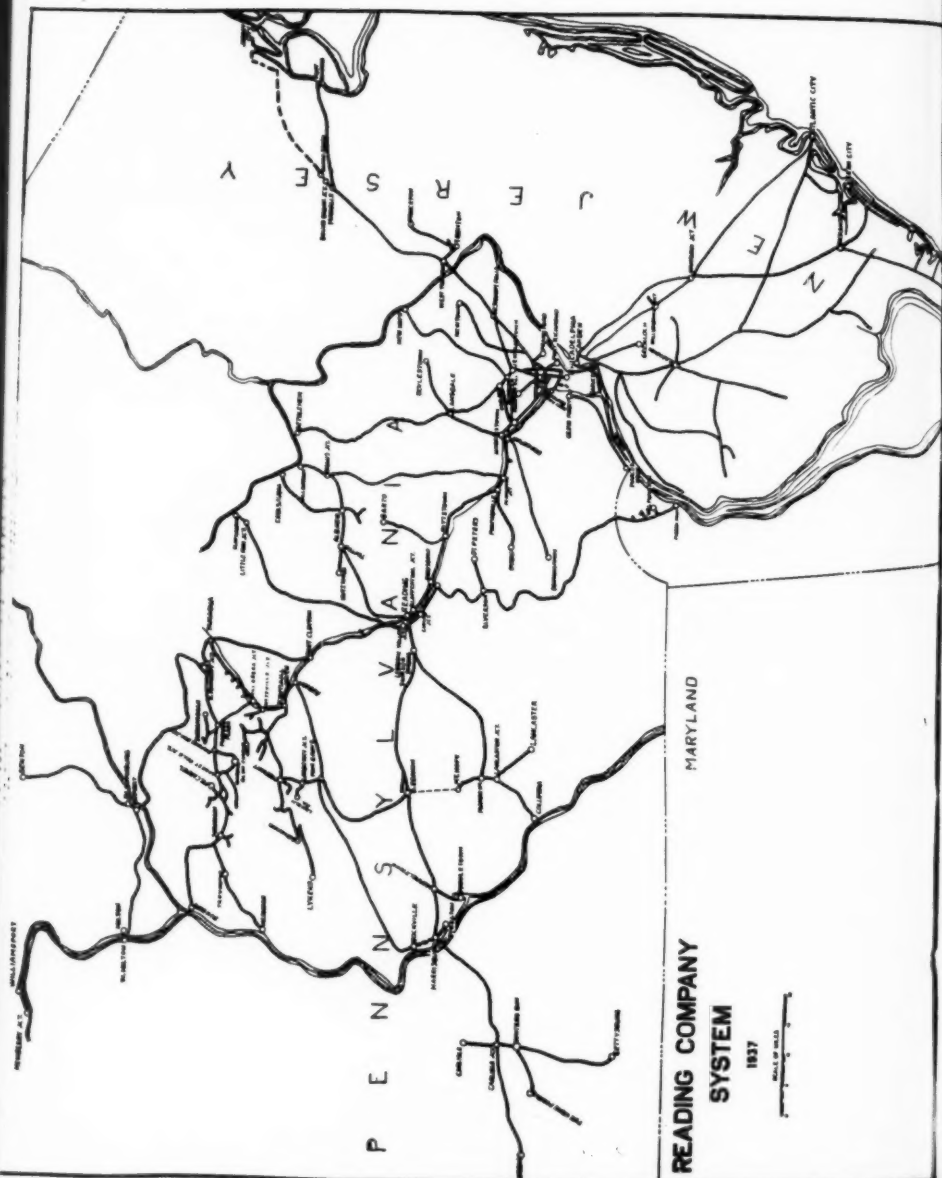
Fourth, the shop numbers assigned to locomotives built in the Reading Shops between 1845 and November, 1871, are based upon the record of the locomotives built new, according to the Annual Reports. Shop numbers may have been applied to locomotives extensively rebuilt, but this practice is not positively known. If several Reading-built locomotives had been placed in service the same month, their shop numbers are not further out of order than the maximum number of locomotives placed on the railroad that month. Shop numbers are not tentatively assigned to Reading-built locomotives after Nov. 1871, but it is possible to know the approximate number annually constructed and the total to date.

Fifth, this list does not include Multiple-Unit equipment or Gasoline-Electric cars.

Sixth, the dates used in the title of this bulletin are based upon, first, the year that the Philadelphia and Reading Railroad received its first locomotive. The roster closes as of December 31, 1944, although a number of major developments have since occurred to mark the beginning of the second century of locomotive building at Reading. For the information of the reader, thirty class 1-10, 2-8-0 type locomotives are scheduled for rebuilding at Reading Shops into the 4-8-4 type, T-1 class and will be numbered in the 2100 series. Almost ten so rebuilt are now in service. Another major development during 1945 was the purchase of ten 5400 H. P. Diesel Electric locomotives from the Electro-Motive Corporation, which are numbered 250-259. A large number of small steam units were scrapped or sold during the same year, in addition to changes in drivers on some of the class I-9 locomotives. Details of these changes may be recorded in future chapters of the Reading motive power history.

Finally, some readers and historians will note that a few of the illustrations have already been reproduced many times. The author regrets such repetitions as in the case of the #408, 4-6-0 and #1027, 4-4-2, but he feels that they held such an important place in the development of Reading power that a gap would be presented if their photographs did not appear.

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Brief History of the Railroad

The Philadelphia and Reading Railroad was organized for the specific purpose of furnishing low cost transportation from the Schuylkill and Mahanoy anthracite fields in Pennsylvania to the eastern seaboard, and in the process, developed into what has proven to be an outstanding example of railroad foresight, management, and efficiency. These coal beds lie north and west of Pottsville, and in this area, a number of railroads served in the development of the Reading System.

The Philadelphia and Reading crosses the central and south-eastern section of the State of Pennsylvania, running slightly from north-west to south-east. The Main Line from Philadelphia to Reading and Pottsville, in itself relatively simple, is complicated by the absorption of many lines, including the laterals of the early days. With one or two exceptions, the merged lines at the western end of the system were of small mileage, and those at the eastern end being relatively larger. In Schuylkill County, no less than twenty-five railroads entered into the Reading System.

It was the original plan of the founders to build a railroad between Philadelphia and Reading only, and on April 4, 1833, they were incorporated and authorized to build a line from Reading to Philadelphia, or to a point connecting with either the Philadelphia and Columbia or the Philadelphia, Germantown and Norristown railroads. The first plans definitely located the line between Reading and Norristown, the remainder being left in the tentative stage. When the railroad reached Norristown, strong influence was exerted to have the line terminate with the Philadelphia, Germantown and Norristown at that point, and to abandon the proposed construction to Philadelphia. In spite of the pressure, the Board of Managers decided to continue the road in accordance with the original plans, and no connection was made with the Philadelphia, Germantown and Norristown until several years later.

Originally it was planned to connect with the Little Schuylkill Navigation Railroad and Coal Company at Reading, that railroad having been constructed from Tamaqua to Port Clinton, with the intention of extending from Port Clinton to Reading. Such a connection would have been to mutual advantage in the light of the rapidly developing anthracite tonnage originating on the Little Schuylkill Railroad.

On account of financial difficulties, the Little Schuylkill was unable to construct the line to Reading, and the Philadelphia and Reading was faced with the loss of this much desired traffic or the alternative of extending its own line. The second course was chosen, and by an Act of March 31, 1837, the company was authorized to extend its line from Reading to Port Clinton on the route previously granted to the Little Schuylkill Railroad. On March 20, 1838, authority was granted to construct the extension either to Pottsville or to a point of connection with the Mount Carbon Railroad, Mount Carbon, which was the point chosen by the stockholders.

The first passenger train drawn by a locomotive left Reading for Pottstown on May 1, 1838. The line from Reading to Norristown was opened July 16, 1838, and the entire line from Philadelphia to Mount Carbon was placed in operation on January 13, 1842. The Richmond Branch, crossing northern Philadelphia to the wharves on the Delaware River, was opened May 17th of the same year.

The company was fortunate from its beginning in having a most competent engineering department to lay out and construct its right-of-way, and the topography of its territory was a natural aid in the descending grades, that as a rule, were in the direction of loaded traffic from the mines. The civil engineering of the early development was in the hands of Moncure Robinson, whose work in the construction of the road is a memorial to his skill and competence, especially the construction of the 1932 foot tunnel and stone bridge of four spans, each seventy-two feet long, near Phoenixville.

Here is a concise statement of the aims of the road that appears in the annual report of the Company, issued in January, 1844, and which contains the report of Richard B. Osborne, Engineer. In this, he says in part: "For seventeen years, previous to the completion of the railway, had its rival, the Schuylkill Canal, carried on successful operations and reaped a rich and abundant harvest in transporting anthracite coal from a region at the head waters of the Schuylkill; even at this period, branch railways were constructed in the Pottsville region, leading from the mines to the canal basins. Here, however, a reshipment of the coal into a boat was necessary, and on its arrival in Philadelphia, after a tedious trip, it had to be discharged upon the wharves, or shipped into coasting vessels, to be conveyed to its destination.

"This state of things, wearisome to the operators, wasteful to the coal, and productive of high prices to the consumers, suggested the idea of having a continuous rail-way, by which the cars loaded at the mines, could pass directly to the tidewaters of the Delaware, and deposit their coal, by means of movable chutes, into vessels of a heavier tonnage than the Schuylkill River could accommodate."

Thus, when completed, the Reading became the first complete rail link between the anthracite fields of Pennsylvania and tidewater.

The tendency of the Philadelphia and Reading to extend its lines did not end with the absorption of the lateral roads, which had been sought as feeders to the ever growing hard coal traffic, and the growth of the system continued until the close of the century. To give some idea of the number of lines acquired by the Philadelphia & Reading, by lease, control, or ownership; below are listed the principal lines becoming a part of the system. This list does not include short time control, or small lines merged with some of the railroads listed.

Table 1

Railroad	From	To	Miles	Locos.	Acquired
Allentown	Kutztown	Topton	4.5	0	1869
Atlantic City	Camden, N. J.	S&E Jersey	170.1	35	1884
Bloomsburg	Bloomsburg	Benton	19.4	3	1928
Catasauqua & Fogelsville	Tamaqua-Tamaqua	Alburtis, etc.	31.7	6	1890
Catawissa	Campbell Hall, N. Y.	Williamsport	92.6	20	1872
Central New England Ry.	Chester	Silvernails, N. Y.	57.0	0	1899
Central & Delaware River	Broad & Vine Sts.	Marcus Hook	3.7	0	1875
City Branch-Phila.	Pottstown	Belmont	3.5	0	1890
Colebrookdale	Delaware River, N. J.	Mt. Pleasant	12.8	0	1870
Delaware & Bound Brook	East Mah. Jct. LSNR	Bound Brook, N. J.	27.0	7	1879
East Mahanoy	Reading	Buck Mt. (MVR)	10.7	0	1863
East Pennsylvania	Gettysburg	Allentown	35.7	14	1869
Gettysburg & Harrisburg	Belmont	Carlisle	41.6	3	1891
Junction	Lebanon & Tremont	Gray's Ferry	4.5	0	1871
Lebanon Valley	Little Schuylkill N&RR	Tremont-Brookside	42.2	0	1858
Mahanoy & Shamokin	Manufacturer's R. R.	Harrisburg	54.0	0	1863
Manufacturer's R. R.	Middletown & Hummelstown	Tamaqua-Tamanend	28.2	12	1871
Middletown & Hummelstown	Mill Creek & Mine Hill	See Note	0.8	0	1875
Mine Hill & Schuylkill H'n.	Moselem Branch	Hummelstown	6.55	0	1890
Mount Carbon	Mount Carbon	Broad Mountain	3.8	0	1861
Mount Carbon & Pt. Carbon	Mount Carbon	Across Sch. River	1.7	0	1873
Mount Carmel	Mt. Carmel	See Note	52.8	30	1864
Newtown Connecting	New York Short Line	Pottsville, etc.	8.5	0	1862
North East Pennsylvania	Cheltenham	Port Carbon	2.5	0	1861
North Liberties & Penn Township	Glenside	Natalie	5.8	2	1908
North Pennsylvania	Front & Willow	Olney	1.2	0	1892
Pa. Po'keepsie & Boston	Philadelphia	Neshaminy Falls	9.3	0	1907
People's Railway	Pottsville	New Hope	25.6	0	1879
Perkiomen	Perkiomen Jct.	Phila.	1.4	0	1857
Phila. & Chester	Gray's Ferry	Broad & Vine	88.0	56	1879
Phila. & Chester Valley	Bridgeport	Bethlehem	94.0	14	1892
		Campbell Hall, N. Y.	8.5	0	1867
		Minersville	23.8	0	1875
		Emanus Jct.	10.2	0	1875
		Chester	21.5	0	1859
		Downington		0	

Table 1 (Continued)

<i>Railroad</i>	<i>From</i>	<i>To</i>	<i>Miles</i>	<i>Locos.</i>	<i>Acquired</i>
Phila. & Frankford	Crescentville	Frankford	2.5	0	1893
Phila. & Reading	Philadelpha	Mt. Carbon (P'ville.)	94.0	0	1833
P&R Terminal R. R.	12th & Market	9th St. PC&N	1.2	0	1893
Phila. Germantown and Norristown	Philadelpha	Gmnt-Norristown	33.7	23	1870
Phila. Harrisburg & Pittsburg	Harrisburg	Lurgan	45.4	1	1890
Phila. Newtown & N. Y.	Philadelpha	Newtown	22.1	0	1879
Pickering Valley	Phoenixville	Byers	11.3	0	1872
Port Kennedy	Main Line	Port Kennedy	1.2	0	1872
Port Reading	Bound Brook, N. J.	Port Reading, N. J.	21.1	0	1890
Reading & Columbia	Sinking Spring	Lancaster	39.5	10	1874
Reading Belt Line	Belt Line Jct.	Around Reading	7.7	0	1902
Rupert & Bloomsburg	Rupert	Bloomsburg	1.6	0	1883
Schuylkill & Lehigh	Cumru Jct.	East Run Jct.	47.6	5	1872
Schuylkill & Susquehanna	Auburn	Rockville	53.4	7	1883
Sch. River East Side R. R.	In Philadelpha	B. & O. Connection	0	0	1883
Sch. River West Side R. R.	In Philadelpha	B. & O. Connection	0	0	1883
Sch. Valley Nav. & R. R.	Palo Alto	Tuscarora	17.05	0	1861
Shamokin, Sunbury & Lewisburg	Shamokin	West Milton	32.1	0	1883
Tabor Branch	Wayne Jct.	Tabor Jct.	2.0	0	1879
West Reading	Reading	West Reading	1.7	0	1873
Williams Valley	Brookside	Lykens	11.0	1	1873
Wilmington & Northern	Wilmington, Del.	Reading	90.4	28	1898

In connection with the foregoing table, the following items are added due to lack of space for including them in the tabulation.

Central New England Ry.

Including its leased lines, the mileage was greater than is shown here. In 1904, control passed to the New Haven.

Junction Railroad.

Sold to the P. R. R., in 1898.

Manufacturer's R. R.

This line, 0.8 miles long, in the City of Harrisburg, was purchased with the intention of extending it to Rockville. This was never done and the Reading continues to have trackage rights over the P. R. R. between these two points, using the M. R. R. as a freight line.

Mine Hill & Schuylkill Haven.

From Schuylkill Haven west to Tremont. From Westwood, north through Mine Hill to Glen Carbon and Gordon. The line from Glen Carbon to Gordon, which included the Gordon Planes, was abandoned in 1896. The road also extended east from Gordon to Ashland, and west of Gordon with many branch lines.

Because of the complicated structure of the Atlantic City Railroad lines, the formation of that system can more readily be written than shown in a table of limited size. The Atlantic City Railroad was the consolidation, on June 14th, 1901, of the erstwhile Atlantic City Railroad, Seacoast Railroad, Ocean City Railroad and Camden County Railroad.

On March 29th, 1889, the following five railroads were merged to form the first Atlantic City Railroad, viz:—

Philadelphia & Atlantic City R. R., incorporated Dec. 4, 1883, to take over the Philadelphia & Atlantic City Railway Co., which had been incorporated March 24, 1876. Camden to Atlantic City, 58.35 miles.

Williamstown & Delaware River, incorporated Dec. 7, 1883, to take over the Williamstown Railroad, which had been incorporated March 13, 1861. The W. & D. R. extended from west from Williamstown to Glassboro and Mullica Hill, and east from Williamstown to Ateco, 22.30 miles.

Glassboro Railroad, incorporated October 16, 1883, Glassboro to Temperanceville, 0.34 miles.

Camden, Gloucester & Mt. Ephraim, incorporated June 17, 1873, Camden to Mt. Ephraim, 3.86 miles.

Kaighn's Point Terminal R. R., incorporated March 8, 1888, in Camden N. J., 1.00 mile.

These five roads formed the Atlantic City Railroad which took part in the merger of June 14, 1901, mentioned above. Of the other three in the 1901 merger, the Camden County R. R. was incorporated Sept. 17, 1889, extending from Mt. Ephraim to Greenloch, 7 miles, and the Ocean City Railroad, incorporated June 8, 1896, Ocean City Jct. to Ocean City, 10.16 miles.

The history of the Sea Coast R. R. is somewhat more complex. The Philadelphia & Sea Shore was incorporated Nov. 12, 1889. This road was sold at foreclosure Feb. 23, 1892, and conveyed in three sections as follows:

1. To the Winslow & Richland R. R., Winslow Jet to Richland.
2. To the Richland & Petersburg R. R., Richland to Seaville.
3. To the Petersburg & Sea Isle R. R., Seaville to Sea Isle City.

These three roads were consolidated to form the South Jersey R. R., on August 16, 1893.

On June 11, 1894, the South Jersey acquired by consolidation the Cape May R. R., incorporated March 19, 1894, which in turn was successor to the Tuckahoe & Cape May R. R., incorporated Feb. 4, 1890, to operate between Tuckahoe and Cape May, 26.80 miles. The South Jersey R. R. was sold at foreclosure March 29, 1898, and was conveyed to the Sea Coast R. R., whose date of incorporation was May 16, 1898.

In 1933, the Atlantic City Railroad was segregated from the Reading System to become part of the Pennsylvania-Reading Seashore Lines. This company was formed to eliminate the wasteful competition between

the Reading and Pennsylvania companies, in the service between Camden and the Atlantic Coast Summer resorts. The P. R. S. L. are operated jointly by the two roads, by each in alternate months. Actually the P-R Seashore Lines are the Atlantic City Railroad, which was formed in 1901, less some abandonments, plus some of the lines of the P. R. R. The new name was adopted July 15th, 1933.

(Subsequent to the formation of the Atlantic City R. R., in 1901, the system acquired three small "resort lines," viz: Wildwood & Delaware Bay Short Line, the Cape May, Delaware Bay & Sewell's Point and the Stone Harbor Railroads.)

In addition to acquiring railroads serving seashore resorts in New Jersey, it was just about fifty years ago that the Philadelphia and Reading aspired to expand beyond the State of Pennsylvania through its ownership of the Central Railroad of New Jersey, its leasing of the Lehigh Valley, its ownership of the Pennsylvania, Poughkeepsie and Boston, and control of the Boston and Maine. With the bursting of this financial "bubble," these properties were given up, and the Reading returned to its status of a major coal carrier, mostly within the confines of the state of its founding.

The Reading too, along with other anthracite roads owning coal properties, was forced by Court Decree, to segregate ownership and operations now conducted by the Philadelphia and Reading Coal and Iron Company, beginning in 1923.

"Reading Company was incorporated on May 24, 1871, as Excelsior Enterprise Company. In 1873 the name of the Company was changed to National Company and by Decree of the Court of Common Pleas, Philadelphia, Pennsylvania, entered December 7, 1896, the name was again changed to Reading Company.

"On October 1, 1923, Reading Company entered into an agreement with:

- Philadelphia & Reading Railway Company
- The Chester and Delaware River Railroad Company
- Middletown and Hummelstown Railroad Company
- The Rupert & Bloomsburg Railroad Company
- The Tamaqua, Hazelton & Northern Railroad Company
- The Norristown Junction Railroad Company
- The Philadelphia & Frankford Railroad Company
- The Philadelphia, Harrisburg & Pittsburgh Railroad Company
- The Schuylkill & Lehigh Railroad Company
- Shamokin, Sunbury & Lewisburg Railroad Company
- New York Short Line Railroad
- Norristown & Main Line Connecting Railroad Company and
- Reading Belt Railroad

for the merger of the several companies into Reading Company. Through this merger Reading Company became the operating Company and assumed operations January 1, 1924.

"Construction work was started early in 1929 on electrification of suburban lines from Philadelphia to Doylestown, Hatboro, West Trenton and Chestnut Hill. Electric train service from Philadelphia to West Trenton, Hatboro and Doylestown was inaugurated on July 26, 1931. In 1931, electrification of the line to Norristown was begun, and on February 5, 1933, electric train service to that point and to Chestnut Hill was commenced. Total electrified first track mileage is 84.07."*

On December 31, 1944, Reading Company owned, leased, operated and jointly controlled 6134.76 miles of track, including sidings, etc., and on the same date they owned the following equipment:

Locomotives	694
Passenger train cars	787
Freight train cars	34549
Floating equipment	66
Work equipment	390

*From "A Century of Reading Company Motive Power," Pages 107 and 108.

Bibliography and Acknowledgements

The data recorded in this history has been collected from a number of sources, and it is from a combination of these sources, that the present record is made possible. The chief sources of material are: The annual reports of the railroad company that from 1844 to 1880 contain a complete roster of locomotives dated November 30th, the close of the fiscal year. Company records, mainly diagram books and "engine cards" have furnished the bulk of information from 1880 to the present. The records of the Baldwin Locomotive Works have been invaluable because of the large number of locomotives purchased from that firm beginning in 1836. Local newspapers have recorded a number of unusual speed runs. The annual reports of small lines eventually absorbed by the Reading, have helped identify locomotives placed on the large system roster. Photographs from the official company files, from railroad families, or fans have identified many details.

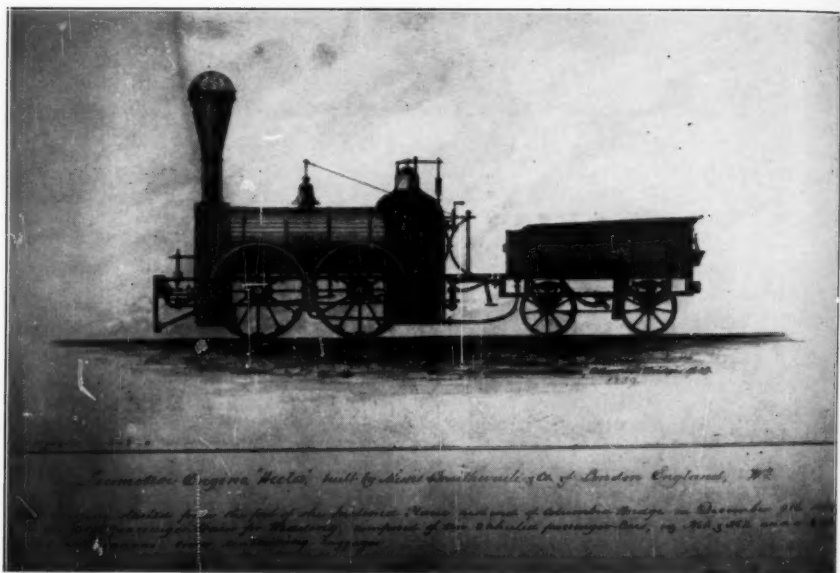
The Reading's excellent publication "A Century of Reading Company Motive Power" (1941), and the bulletins of the Railway and Locomotive Historical Society have been consulted. Some repetition of printed matter has been the result, but it was necessary to refer to these sources for authentic information and to repeat some of the facts that should not be omitted.

The author is indebted to many persons, either as individuals or those having connections with firms or institutions, for their interest and patience when he has asked for assistance. The cooperation of the Reading Company has been extended. Irvin L. Gordon, Publicity Manager, and one of his former assistants, Robert E. Osterhout; Jay V. Hare, Secretary and Treasurer; and J. W. Barr at Reading Shops; together, without their assistance, this record would have been impossible. The Baldwin Locomotive Works and the attention given by their Librarian, Paul T. Warner, has permitted a complete list of Baldwin built locomotives and construction numbers to be made for the Reading. The American Locomotive Company also assisted in addition to a number of historical societies, particularly the Historical Society of Pennsylvania at Philadelphia, and the Bucks County Historical Society, located at Doylestown, Pennsylvania.

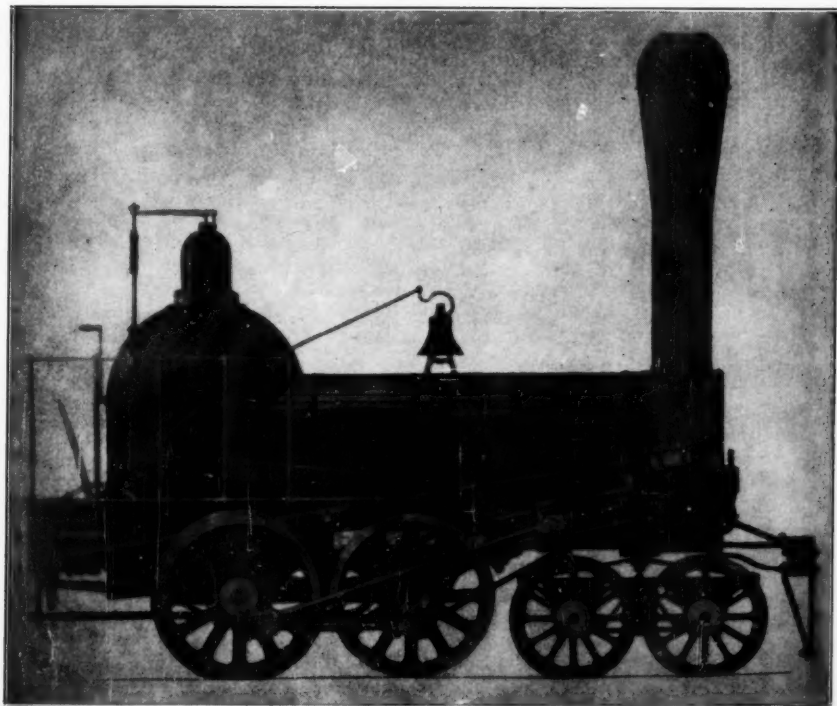
Individually, F. Stewart Graham has spent countless hours checking available figures in addition to searching for and outlining much of the material contained in the text. Charles E. Fisher, on behalf of the Railway & Locomotive Historical Society, and editor of this bulletin, has kindly arranged to publish the material. Charles B. Chaney, Walter A. Lucas, John G. Smith, Jr., Thomas Norrell, W. R. Osborne, C. R. Weaver, and the late Karl E. Schlachter, have furnished photographs and data from their private collections. Frank C. Hoffman has accompanied the author on many trips to observe present day train operation. And lastly, but far from the least, the author thanks the many roundhouse foremen and railroad men, retired or working, for sharing their comments and experiences.

GEORGE M. HART.

George School, Pennsylvania
Jan. 1, 1945.



—Courtesy of the Historical Society of Pennsylvania.
P. & R. "Hecla"—Braithwaite & Co., England, 1839.



—Courtesy of the Reading Co.
P. & R. "Gowan and Marx"—Eastwick & Harrison, 1839.

READING LOCOMOTIVES 1836-1871

The Philadelphia and Reading Railroad with its Main Line, having been founded and constructed during the early era of the steam locomotive, was in a position to have an important share in its development. The men of the mechanical department were among the best engineers of their time, and there have been few periods in the road's history, when an item of its motive power has not been of unusual interest.

Some of the experiments made were highly successful and others resulted in failure, but most of them contributed to the development of the Iron Horse. A number of accepted standard locomotive practices originated on the Reading, many of which developed from the road's determination and experience to use anthracite for fuel. Several of these experiments were conducted without prior experience or knowledge, and what success was achieved, was the result of persistent and resourceful trial and error methods.

Many of the first Reading locomotives were imported from Great Britain, due to the fact the road was heavily invested by British capital. Eight locomotives built by Braithwaite, Milner and Company, London, were placed in service from 1838 to 1841, and all were of the 0-4-0 type weighing approximately eight tons. Their names were *Rocket*, *Firefly*, *Spitfire*, *Planet*, *Dragon*, *Comet*, *Hecla* and *Gem*. It is interesting to note that the *Hecla* and *Gem* were the last of the early locomotives imported from Britain by any American railroad. In spite of the time that they were built and operated, their service record is remarkable, while they remained in substantially their original form.

The history of this group is shown in the appended rosters, but of special interest is the *Rocket*, used until March, 1879 and running 310,164 miles. It was then stored at Reading and exposed to the weather until 1892, when it was resurrected for exhibition purposes at the World's Fair in Chicago in 1893. The *Rocket* was also exhibited at the Saint Louis Exposition in 1904, and was afterward on display at the Columbia Avenue Passenger Station, Philadelphia. In 1933 it became a part of the permanent exhibit at The Franklin Institute, Philadelphia, and is one of three old Reading locomotives in existence, anywhere. The *Spitfire* was sold to the Leggett's Gap Railroad (now a part of the Delaware, Lackawanna and Western) in 1851, used in construction and roadway service, and resold to the Spencer Coal Company of Dunmore, Pennsylvania, in 1859. It was dismantled during the 1880's. At least five of the eight locomotives are known to have been in service during the middle 1860's.

The Annual Report for 1844 records that there were fifty-five locomotives on the road, with the following number from each builder:

Baldwin	19
Locks & Canals Co.	11
New Castle Mfg. Co.	6
Braithwaite, Milner & Co.	6
Norris—Philadelphia	4
Eastwick & Harrison	3
Rebuilt by P. & R.	2
Dotterer & Co., Reading	1
Ross Winans	1
Not stated	2

By 1854 the list had grown to 141, with 47 built by Ross Winans, 34 by Baldwin, 30 built and 13 rebuilt by the company, and one each from the Boston Locomotive Works; Davenport, Bridges and Kirk; Danforth, Cooke and Company; and Taunton. Although the Winans' locomotives were in the majority, the record in later years is clear that the Reading relied upon their own shops and Baldwin's for motive power. The railroad itself tried to maintain the position of meeting its own requirements, but there were times when the demand for new locomotives, plus repairing or rebuilding of existing ones, taxed the capacity of the shops to the extent that it was necessary to order locomotives from the nearby Baldwin plant in Philadelphia.

The first locomotive to be received by the Philadelphia and Reading was the Baldwin built *Neversink*, shop number 40, a 4-2-0, finished in August, 1836. The Braithwaite locomotives followed. But to the *Gowan & Marx*, built by Eastwick and Harrison, fell the honor of hauling the first train between Reading and Philadelphia, on December 5, 1839. The train was of 80 cars, with a gross weight of 368 tons, and the trip required nine hours.

In the summer of 1839, the Philadelphia and Reading had placed an order with Eastwick and Harrison for what became the famous *Gowan & Marx*, the first of a series of Philadelphia and Reading locomotives to attract the attention of the railroad and mechanical world. Although it was not the first 4-4-0 type, it was a remarkably successful engine for its time. This locomotive was designed for freight service, and weighed eleven tons, with nine tons on the drivers. This unusual distribution of weight was made possible by placing the driving wheels close together, with the rear axle under the firebox, and also using a comparatively short boiler barrel. The firebox, arranged for burning anthracite, was of the Bury or "haystack" pattern, about five feet long outside. The cylinders were placed on an angle, with pistons connected to the rear drivers. The Eastwick reversing mechanism was applied. This was the first locomotive to be equipped with a blower. The exhaust steam was discharged into two copper chests, one connected with each cylinder, and from these chests it escaped up the stack through a number of small tubes. This device was reported to have kept the anthracite fire "in a state of intense activity and generates an abundance of steam."

The equalizers used on the *Gowan & Marx* consisted of heavy cast iron beams placed above the frames, one on each side, with their ends bearing on round vertical pins that rested on the tops of the driving boxes. From the center of each beam was suspended a half-elliptic spring which supported the main frame. This arrangement is shown on all known Eastwick and Harrison locomotive drawings up to 1842.

On one of its first trips over the road, made February 20, 1840, the *Gowan & Marx* amazed the railroad world by hauling a train of 104 loaded four-wheel cars, weighing 423 tons, from Reading to Philadelphia, at an average speed of 9.82 miles per hour. Including the weight of the locomotive and tender, the weight of the train equalled forty times that of the locomotive. The line was level or slightly descending, with only one opposing grade, which was 2100 feet long, rising at the rate of 26.4 feet to the mile. In a report prepared by G. A. Nicolls, Superintendent of Transportation of the railroad company, under date of February 24, 1840, the locomotive was stated to have consumed 5600 pounds of red ash anthracite, while evaporating 2774 pounds of water. This represented an actual evaporation of 4.13 pounds of water per pound of fuel. In the same report it was stated that the *Gowan & Marx* had cylinders measuring $12\frac{3}{4} \times 16$ inches, and driving wheels 40 inches in diameter. These figures differ somewhat from those usually given in the descriptions of the locomotive. G. A. Nicolls gave the weight of the locomotive as 24,660 pounds with 18,260 pounds on drivers, and stated that "the steam ranged from 80 pounds to 130 pounds per square inch, to which latter pressure the safety valve was screwed down." Assuming a mean effective pressure equal to 85% of 130 pounds, the ratio of adhesion would have been approximately 2.5. As the locomotive worked with a fixed cut-off, this certainly indicates that the engine operated with a light throttle if the higher pressure was actually attained. Even when carrying a pressure of only 80 pounds, the ratio of adhesion was only 3.42. These figures are of course approximate, as the actual mean effective pressure cannot be determined.*

It is interesting to compare the performance of the *Gowan & Marx* with that of the Baldwin 4-2-0 type locomotive *Neversink*, the first locomotive built for the Philadelphia and Reading. On March 12, 1839, the *Neversink* hauled a train of 45 cars, weighing 223 tons, from Reading to Bridgeport, a distance of 40 miles, at an average speed of $12\frac{3}{4}$ miles per hour. The *Neversink* had cylinders $10\frac{1}{2} \times 16$ inches and driving wheels 54 inches in diameter; and the steam pressure on the run was stated by Mr. Nicolls as varying between 80 and 120 pounds. Wood was used for fuel, and the performance was rightly judged to have been highly creditable. The tests with the *Gowan & Marx*, however, proved the advantages of using coupled driving wheels, although a run made later by a single driver locomotive, as will be noted, was most unusual.

The *Hichens & Harrison* was a Baldwin 4-2-0 type locomotive later renamed *Seminole*. This locomotive on February 9, 1841, broke its own

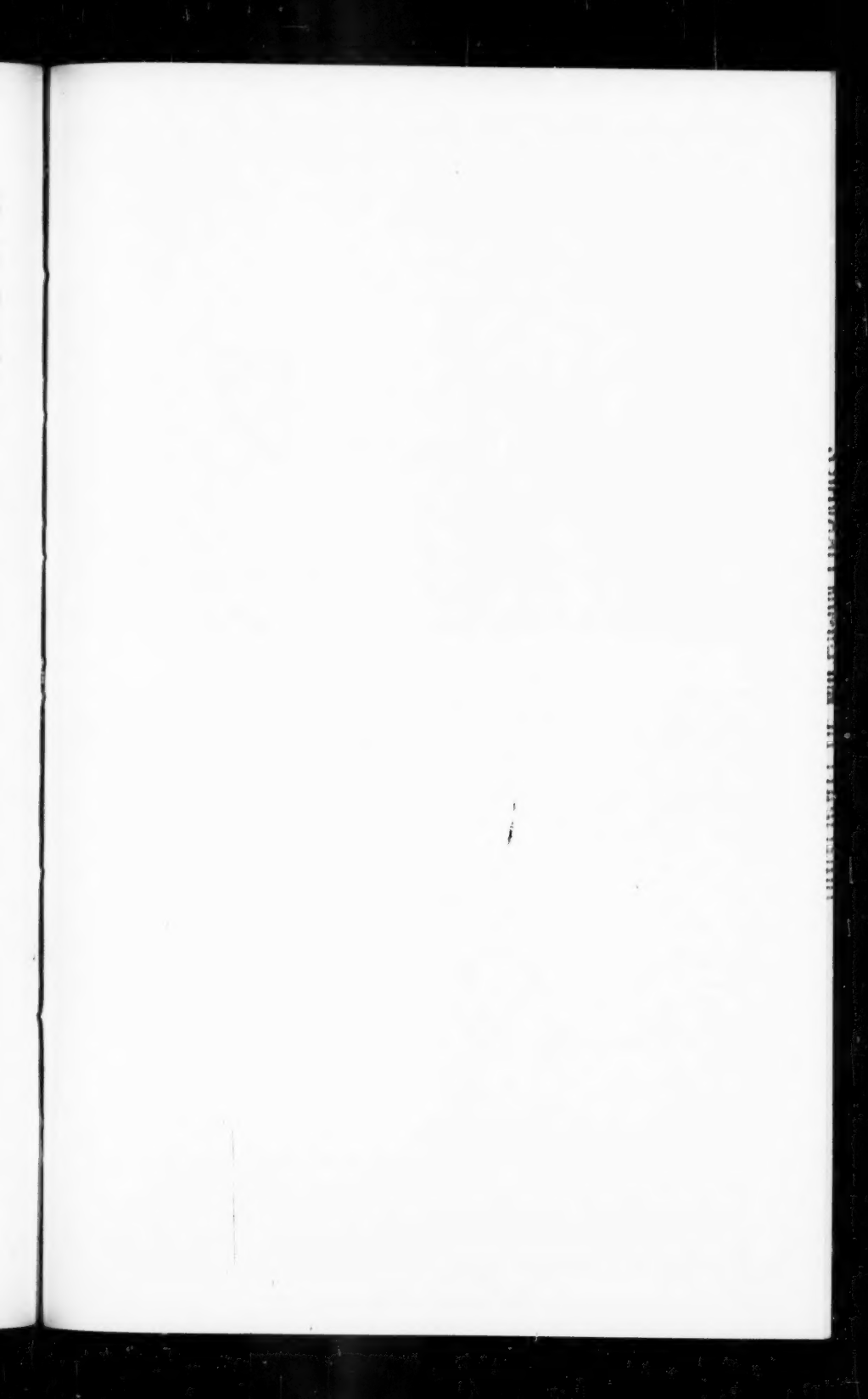
* Information from "The 4-4-0 (American) Type of Locomotive"—Paul T. Warner—Bulletin #35, Page 14.

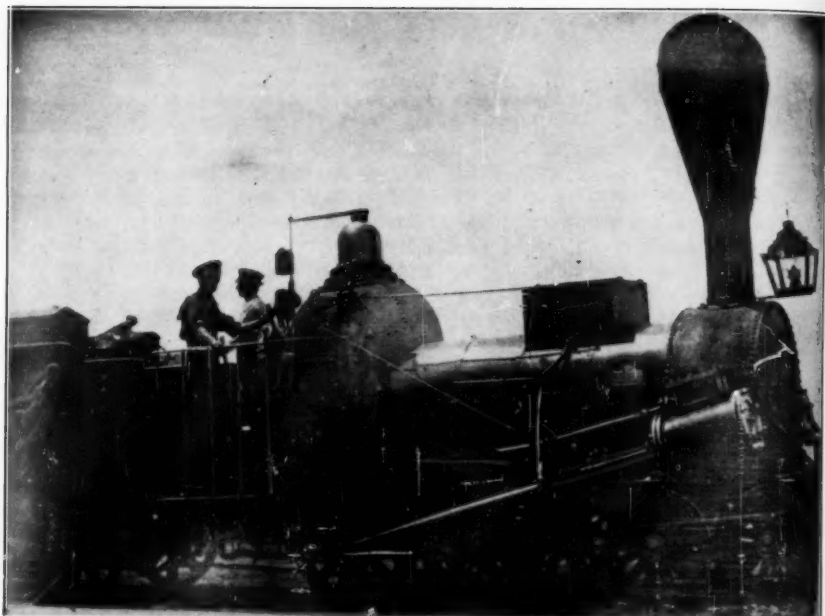
record and that formerly held by the *Gowan & Marx*, by taking 105 loaded cars over the 54½ miles between Reading and the junction of the Philadelphia and Columbia Railroad. In addition to other freight, this train carried 1318 barrels of flour, 870 kegs of nails and spikes, 635 bushels of grain, 63 long tons of bloom and bar iron, 20 cords of wood, and eight casks of oil. The total weight of the train was 481½ long tons of which 308½ was the weight of the freight and 173 of the cars. All cars were four-wheeled and the wheels were 36 inches in diameter. Lard and tallow was used in the journals. The total length of the train was 1260 feet and its average speed for the run was 11.1 miles per hour. On this trip, the locomotive used 2.51 cords of wood, 1804 gallons of water, and seven quarts of oil. The train was believed to be the longest and heaviest ever hauled by a single locomotive in the United States or Great Britain, according to the *Railway Journal* of 1841.

So successful was the *Gowan & Marx* that twelve of the same type were ordered, not from Eastwick and Harrison, but from Locks and Canals Company, of Lowell, Massachusetts, on the same general plans. They were ordered in 1842, and delivered a year later. According to records furnished by the railroad company, one of these locomotives eventually became Number 3 on the People's Railway extending from Pottsville to Minersville, sometime after 1871. On this line it had for years been unused, but was "discovered" in a storage shed at Pottsville about 1923. The Reading was interested to preserve the locomotive and has since placed it in The Franklin Institute, Philadelphia, where it is one of the two Reading locomotives on exhibition.

The wheelbase of the People's Railway Number 3 at The Franklin Institute is considerably longer than that of the *Gowan & Marx*, and because of other features of its construction, it may be questioned whether it is a Locks and Canals or an Eastwick and Harrison locomotive. A recently "discovered" photograph, furthermore, possesses strong evidence that People's Railway #3 was built by Eastwick and Harrison and is not one of the copies of the "*Gowan & Marx*" built at Lowell.

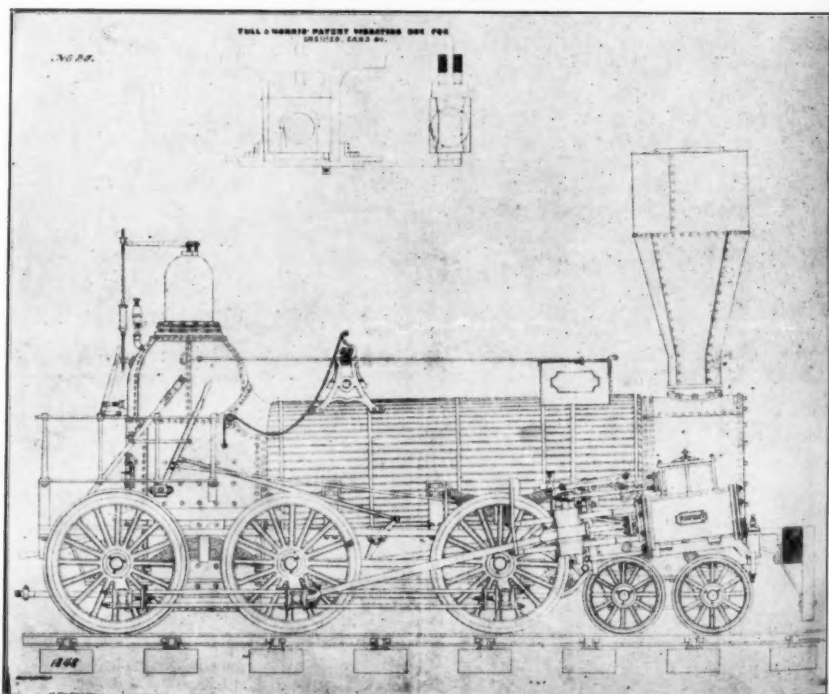
Although it was some years before Matthias Baldwin yielded to adopting the 4-4-0 type, the next Philadelphia and Reading locomotives attracting attention were thirteen built by him in 1844-45. These were of the 0-6-0 type and were equipped with Baldwin's flexible beam truck, which is described in Baldwin Locomotives (April, 1923) in the following words: "The first and second pair of wheels were held in place by a pair of vibrating beams, which, while holding the axles parallel to each other, allowed them to move laterally across the track, one to the right, the other to the left, or visa versa. The entire weight was thus available for adhesion, while at the same time the locomotive could easily traverse sharp curves." This feature was also applied to the first 0-8-0 type locomotives on the Reading, of which, seventeen were placed in service in 1846. The *Atlas* and *Hercules* were larger than the other fifteen and were especially built for pusher service on Falls Grade on the Richmond Branch, the only heavy southbound opposing grade from the anthracite fields to tidewater. These two locomotives are said to have been the first to have sand boxes and engine cabs on the Reading.





—Courtesy of Thomas Norrell.

P. & R. "Outalaunce"—Newcastle Mfg. Co., 1843.



—Courtesy of the Reading Co.

P. & R. "Chesapeake"—Norris Bros., 1847.

In the following year (1847) a new type locomotive was designed by Septimus Norris, and built by Norris Brothers, Philadelphia, who began to feel the pinch of competition from Baldwin by the success of his flexible beam truck. This locomotive, the *Chesapeake*, was probably the first of the now common "ten-wheelers" on any American railroad. The cylinders were 14½ by 22 inches and the driving wheels 46 inches in diameter. The locomotive was rated as weighing 20 long tons, or about 44,000 pounds. It had a "haystack" boiler, with a large dome over the firebox. Wood was used for fuel. The cylinders were inclined and the main rods were connected to the second pair of drivers. The front and back side rods were entirely independent of each other, the main rod taking hold of a third bearing on the pin, between the two side bearings. These side rods were of the open type, each being formed of two rods which were spaced apart vertically so that the crank pin brasses could be placed between them. Nuts on the ends of the rods bore against keepers which held the brasses in place. The first and second pairs of drivers had plain tires without flanges, and the leading truck had a short wheel base and swivelled about a center pin, but carried very little weight. Accounts differ as to the actual service rendered by the locomotive, but it was evidently found desirable to place more weight on the truck.* According to the Annual Reports of the railroad company, the locomotive was partially rebuilt in 1849, and to November 30th of that year, had run 38,750 miles in the "coal trade." It was again rebuilt into almost an entirely new locomotive in June, 1861, and apparently was the only "ten-wheeler" on the Reading until the coming of the Millholland "Gun-boat" *Nevada* in 1863.

So far this account has neglected to mention locomotives built at the Reading Shops, at Reading, Pennsylvania. Lewis Kirk was appointed master of machinery on October 1, 1843, and he may be considered the father of locomotive building at Reading. It was he who began the practice of rebuilding locomotives, and in 1845 the tiny *Picayune* of his design, a 2-2-0 with 4x8 inch cylinders, used by officers of the road, emerged as the first locomotive built at Reading. In 1846 another inspection locomotive was built, the first *Ariel*, and in 1847, a road engine, the *Palo Alto*, made its appearance. The first passenger locomotives built at the Reading Shops were the *Buena Vista* and *Vera Cruz* in 1848, the same year that Lewis Kirk resigned, with twelve Reading built locomotives to his credit.

Kirk's locomotives did not receive notoriety except the *Novelty* built in June, 1847, on the theory that the successful burning of anthracite required an exceptionally large firebox. This principle was carried to such extremes, that in this case it was necessary to mount the boiler proper on one vehicle and the operating machinery on another, the steam passing from the main boiler to the auxilliary boiler (or accumulator) through jointed pipes and thence to the cylinders. The design included a condensing system and a forced draft blower, but in spite of these contrivances, the locomotive possessed many faults, the

* Information from "History of the 4-6-0 (Ten-wheeled) Type Locomotive"—Paul T. Warner—R. & L. H. S. Bulletin #64, Page 8.

chief one being lack of adhesion. All of the special features of the design were patented. Although a courageous experiment, it was a complete failure except to prove that it was not practical. The locomotive was withdrawn from the railroad in 1849. The real monument to Lewis Kirk, however, was a silver cup presented to him by employees of the shop when he withdrew from the service of the Reading.

The problem of using anthracite as fuel in locomotives was still an unsettled question in the middle 1840's, but there was at least one person who was making strides. He was Ross Winans of Baltimore, Maryland. He had been building locomotives for more than ten years and in 1847, the Philadelphia and Reading purchased four of the 0-8-0 type, with fireboxes suitable for burning anthracite. There is little doubt that these locomotives proved more than satisfactory for the Reading paid Winans a bonus of \$500.00 per locomotive on the order. Furthermore, forty-three additional 0-8-0's were purchased from Winans between 1850 and 1855. The success of this group is also partly due to James Millholland's application of a water space in the rear of the firebox, and the installation of water tube grates. This latter feature was Millholland's first experiment in burning anthracite, and marked the beginning of his distinguished career in the field.

The Winans' locomotives were called "Camels" because of the location of the cab covering the top of the boiler. They were of entirely different design from the Wootten boiler locomotives with the cab placed ahead of the firebox, and constructed years later. There is however, the possibility that the reference re-originated when the middle cab locomotives made their appearance. A striking feature about the Winans' locomotives was the use of two "firing chutes" through the top of the firebox that made it possible to spread coal to all parts of the grate area.

If there was one person who designed a locomotive that could be called "typically Reading," it was James Millholland, who succeeded Lewis Kirk in 1848. Although there is much to say for John E. Wootten's famous culm-burning firebox and boiler, it was Millholland who laid the foundation for the practical possibility of Wootten's patent. The effects of Millholland's designs with their various earmarks, are on the record, and still common at the turn of the century by the presence of many of his locomotives. Millholland's designs however, were not so universal as those of Wootten's, but there was no other one person on the Reading, or on few other railroads of equal size, whose talents were so closely confined and identified with the motive power.

After Millholland had found his footing, the first group of locomotives designed by him, were built at Reading Shops in 1852. These were the 2-6-0 type *Pawnee* class. They were not true moguls, however, because the leading wheels were placed back of the cylinders and were held rigidly to the main frames. The boiler had an overhanging firebox, with a short intermediate combustion chamber, thus necessitating the use of two groups of tubes. In design and workmanship these locomotives represented the best practice of the day, but they were poor steamers. Millholland at this time followed many ideas of the period and had an assortment of gadgets for improving the draft and firing

anthracite, but all did not prove very practicable or reliable on the seventeen locomotives of the *Pawnee* class.

Concurrently with the construction of the *Pawnee* class, Millholland was building two 4-4-0 type passenger locomotives named *Michigan* and *Illinois*. These had forged iron driving wheels seven feet in diameter and an unusual arrangement of Stephenson link motion, driven from a double return crank and placed outside the rods. This was one of the first applications of an outside motion.

In 1857, a rebuilt locomotive, *Vera Cruz*, emerged from the shops with the firebox placed above the level of the engine bed and which, according to Angus Sinclair, was the first to be so constructed. Thus the *Michigan*, *Illinois* and *Vera Cruz* paved the way for the first standard class built by the Reading, namely the *Hiawatha* and *Minnehaha* in 1859. They were exceptionally well designed, for passenger service. The firebox was placed above the frames and extended back over the rear driving axle to provide a grate area of 24.5 square feet. The boiler of the *Hiawatha* class had two domes, the steam supply being drawn from both and controlled by a balanced throttle valve placed in the front dome. The cylinders were securely bolted together and also to the frames, and provided a flat bed on which the smokebox rested. Other features including underhung springs, and an excellent design for shifting link motion. This class, although slightly modified in 1867, was built in large numbers (a total of 44) until the advent of the first 4-4-0 with a Wootten boiler in 1878.

An equally successful standard class developed by James Millholland was a group of "ten-wheelers" for freight service, called "Gunboats." The first was the *Nevada* built at Reading in March, 1863. Most of this group were built at Reading; however, some were supplied by the firms of Norris at Lancaster, and also by Baldwin. The first group with drivers 46 inches in diameter; of which 82 were built at Reading, 19 by Norris, and 10 by Baldwin, were received until 1873. In that year a similar group, but having drivers 54 inches in diameter, were built at Reading, and 33 were made from 1873 to 1877. Together these "ten-wheelers" were the mainstay of the freight power on the Reading until the advent of the Consolidations in 1880. A number were later rebuilt and the last remained, as rebuilt, on the roster as late as 1925.

The third standard class to originate prior to Millholland's retirement in 1866 was the *Kentucky* or "Centipede" class. They were of the 0-10-0 type especially designed for pushing service on Falls Grade and the heavy grades on the Mahanoy and Shamokin Branch. Seven were built at Reading from 1864 to 1872. The *Kentucky* class was developed from the 0-12-0 *Pennsylvania* built in 1863, also for service on Falls Grade. The main rod was connected to the number four drivers. One pair of driving wheels was removed when the locomotive was rebuilt seven years later. Water was carried in two side tanks, and in another placed on the top of the firebox. No space was provided for coal, as firing was done at each end of the short, one mile, trip.

The three standard Reading classes of the period, the *Hiawatha*, *Ten-Wheel*, and *Kentucky*, and later the 0-4-0, 0-6-0 and 0-8-0 types standardized in 1866 and 1869, respectively, bear the unmistakable ear-

marks of Millholland's design. Many had rounded iron cabs; while the stacks, the round guide bars with passed through longitudinal openings in the crossbars, the flattening of the sides of the cylinders, and the smokeboxes with a flat base resting on the cylinder castings, were all very typical. But most important historically was the standardization of equipment, at so early a date, developed along with the heavy repairs and new locomotives built at the one central shop, at Reading. Thus the Philadelphia and Reading roster was not affected by the individual practices at many division shops and sundry Master Mechanics. The Reading was fortunate to acquire only a moderate number of locomotives from acquired lines, and to have James Millholland as master of machinery from 1848 to 1866. The result was that toward standardization of motive power, the Reading was far in advance of the great majority of railroads.

When numbers were substituted for names in December, 1871, the Reading had well over 300 locomotives. It was unusual that the names of presidents, directors, or other officials were used—practically all of the locomotives named for individuals were from acquired lines. One can imagine the relief that was felt by the name selector, the train dispatcher, and other record keepers, when names were discontinued. Indeed, it was a time of railroad expansion, and numbers were a far easier code to use when the locomotive became common.

**Locomotives Built (new) at Reading Shops, Reading, Pa.,
to 1871 inclusive**

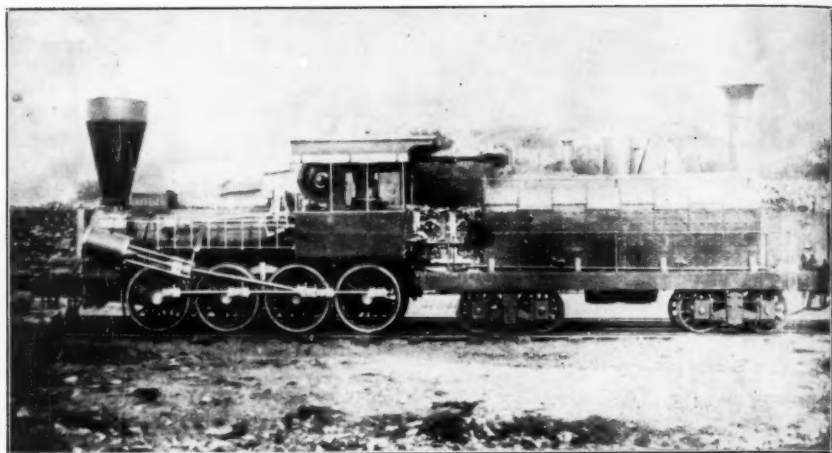
1845— 1	1854— 2	1863—16
1846— 1	1855— 2	1864—12
1847— 4	1856— 1	1865—19
1848— 6	1857— 1	1866— 7
1849— 0	1858— 0	1867— 9
1850— 0	1859— 2	1868— 7
1851— 1	1860— 1	1869—12
1852— 8	1861— 0	1870—16
1853— 7	1862— 3	To Dec. 1 1871—18

Total—156 locomotives.

The locomotives included in the list from 1836 to 1871 are arranged according to their date of first running on the Philadelphia and Reading, either as new or acquired locomotives from various sources. The disposition of the locomotive is noted, and those remaining when the numbering system was inaugurated and names abolished in December, 1871, are shown with their assigned numbers at the extreme left. As numbered locomotives, their history follows on the 1871-1900 list. Save for a few Inspection and company service locomotives, numbers were substituted for names in all cases.

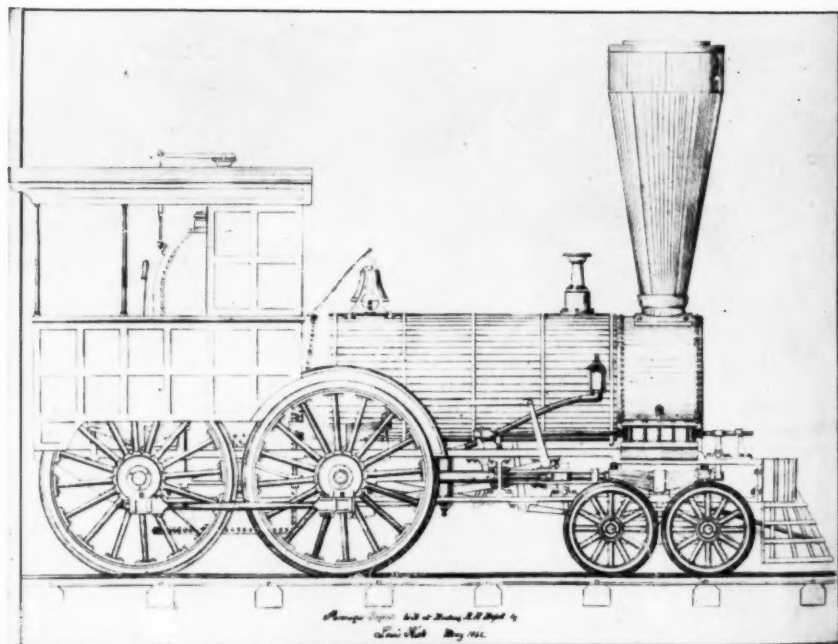
From 1864 to 1871, twenty-seven Mine Hill and Schuylkill Haven locomotives were not named, but continued to carry their home road numbers. They were first classified by the Philadelphia and Reading when their number system was put into effect, December, 1871.

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—Courtesy of W. A. Lucas.

P. & R. "Novelty"—Reading Shops, 1847.



One of the first passenger locomotives built at Reading Shops, probably the "Cerro Gordon"—1848.

Locomotives—1836-1871

1871 #	Name	Builder	C. N.	Date	Type	Cyl.	Dr.	Wt.
	Neversink	Baldwin	#40	8-1836	4-2-0	10½x16"	54"	23744
		P & R*		1846	0-6-0			42750
		Expl. 1846, Ret. 1847						
	Delaware	Ross Winans		12-1837	0-4-0	14x24"	42"	22725
		Out of service 1845-7, Ret. 1847						
1	Rocket	Braithwaite		1838	0-4-0	10½x16"	42"	18900
		P & R*		1863				26550
	Fire Fly	Braithwaite		1838	0-4-0	10½x16"	42"	18900
	Engineer	P & R**		1843				19800
		P & R*		1848	Expl. 5-1-1848			
2		P & R*		1863	0-4-0T			27225
	Spitfire	Braithwaite		1838	0-4-0	10½x16"	42"	18900
		Sold—Leggett's Gap R. R.,		4-22-1851				
	Comet	Braithwaite		1838	0-4-0	10x16"	60"	18900
	Antelope	P & R**		1845	0-6-0	10½x16"	60"	22125
		P & R*		1863	0-6-0			27675
		Sold—American Dredging Co.,		11-17-1871				
	Dragon	Braithwaite		1838	0-4-0	10½x16"	42"	18900
	Atalanta	P & R**		4-1841				23175
		Sold—Richmond & Danville R. R.		3-21-1853				
3	Planet	Braithwaite		1838	0-4-0	10½x16"	42"	18900
		P & R*		1863	0-4-0			26550
	Hecla	Braithwaite		1839	0-4-0	10½x16"	42"	18900
		Sold—John O'Fallon, St. Louis, Mo.,		3-15-1852				
	Hichens & Harrison	Baldwin	139	12-1839	4-2-0	12½x16"	48"	26710
	Seminole	Renamed prior to 11-1844, sc.		1863				
	Gowan & Marx	E & H		1839	4-4-0	12¾x16"	40"	24660
		P & R*		8-1856				31050
		Traded to BLW 8-30-1860 for "Active" (and cash)						
	Gem	Braithwaite		1841	0-4-0	10½x16"	42"	18900
	Gazelle	P & R**		1845	0-6-0			24750
		Sold—Camden & Atlantic R. R.,		10-31-1853				
	Monocacy	New Castle Co.		1842	4-4-0	12x19"	56"	30825
		P & R*		1847				36800
		Sold—Camden & Atlantic R. R.,		10-31-1853				
	Perkiomen	Baldwin	160	4-1842	4-4-0	10½x18"	48"	28350
		Sold—Panama R. R.,		11-30-1850				
	Mahanoy	Baldwin	176	5-1842	4-2-0	12x16"	50"	28350
		P & R*		1846				45450
		P & R*		6-1856		Sc. 1871		
	Wyoming	Baldwin	162	5-1842	4-2-0	10¾x16"	54"	24300
		P & R*		2-1847		Sc. 1862		44100
	Sanatoga	Baldwin	177	5-1842	4-2-0	12x16"	54"	27000
		P & R*		6-1847				42200
15	Lycoming	Dotterer & Co.		1842	4-2-0	11x20"	54"	23400
		Sold—		1848				
	Boston	E & H		1842	4-4-0	12½x18"	45"	27225
		Sold—Richard Jones & Co.,		9-16-1846				
	Pottsville	New Castle Co.		1842	4-4-0	12x16"	40"	24750
		Sold—Panama R. R.,		8-22-1851				
	America	Norris-Phila		1842	4-4-0	12½x20"	48"	30150
		Sc. 11-1866						
	Manatawny	Norris-Phila.		1842	4-4-0	12½x20"	48"	30150
		P & R*		6-1858		Sc. 1870		41625
	J. E. Thayer	E & H		1842	4-4-0	12¼x18"	43"	28125
		Sold—		1847				

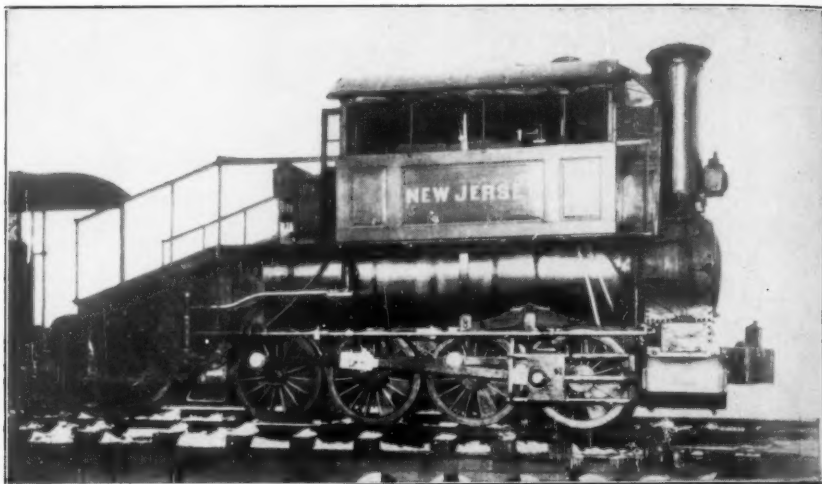
1871 #	Name	Builder	C. N.	Date	Type	Cyl.	Dr.	Wt
	Reading	Dotterer & Co.		1842	4-4-0	12½x16"	40"
14		P & R*		9-1846				36450
	Tuscarora	New Castle Co.		1842	4-4-0	12x16½"	40"	26550
4		P & R*		6-1855				31050
	Pennsylvania	New Castle Co.		1843	4-4-0	12x16"	40"	25650
		Sc.		1855				
	Conestoga	L & C Co.		1843	4-4-0	12½x16"	40"	26550
		Sold—Schuylkill Navigation Co.,		5-27-1853				
	Ontalaunee	New Castle Co.		1843	4-4-0	12x16"	40"	27000
		P & R*		1848 & 1862	(-?-T)			38700
		Sold—Black Heath Mining Co.,		11-17-1864				
	Schuylkill	L & C Co.		1843	4-4-0	12½x16"	40"	26550
5		P & R*		1848				33075
	Shenandoah	L & C Co.		1843	4-4-0	12½x16"	40"	26550
		Sold—Richard Jones & Co.,		5-28-1847				
	Tioga	L & C Co.		1843	4-4-0	12½x16"	40"	26550
		Sold—Hugh Campbell for Missouri Coal Co.		9-30-1850				
	Shamokin	L & C Co.		1843	4-4-0	12½x16"	40"	26550
		P & R		11-1855				37125
6	Potomac	L & C Co.		1843	4-4-0	12½x16"	40"	26550
		Sold—A. Parker & Co.		6-20-1853				
	Huron	L & C Co.		1843	4-4-0	12½x16"	40"	26550
7		P & R*		1848 & 11-1863				34300
	Osceola	L & C Co.		1843	4-4-0	12½x16"	40"	26550
8		P & R*		1849				33300
	Erie	L & C Co.		1843	4-4-0	12½x16"	40"	26550
9		P & R*		1849 & 1863	4-4-0T			38700
	Cherokee	L & C Co.		1843	4-4-0	12½x16"	40"	26550
		Sold—Charles Barber,		6-29-1850				
	Roanoke	L & C Co.		1843	4-4-0	12½x16"	40"	26550
		Sold—Camden & Atlantic R. R.,		10-31-1853				
	Susquehanna	L & C Co.		1843	4-4-0	12½x16"	40"	26550
		Sold—State of Michigan prior to		11-1844				
	Columbus	New Castle Co.		1844	0-6-0	16x19"	41"	38150
42		P & R*		11-1856				50400
10	United States	Baldwin	196	6-1844	0-6-0	15x18"	46"	41850
	New England	Baldwin	197	7-1844	0-6-0	15x18"	46"	44325
		P & R*		9-1858		Sc. 1871		48600
	Atlantic	Norris-Phila.		1844	?	?	?	42075
11		P & R*		1847				45225
	Richmond	Norris-Phila.		1844	0-6-0	14½x20"	46"	36925
		Expl.		9-1844				
	Philadelphia	P & R**		10-1844	0-6-0			40500
		P & R*		1849, 1851 & 1854		Sc. 1870		49500
	New York	Baldwin	198	7-1844	0-6-0	15x18"	46"	42975
47		P & R*		7-1857				53550
	Ontario	Baldwin	199	8-1844	0-6-0	15x18"	46"	42975
60		P & R*		11-1859	0-6-0			49725
	Virginia	Baldwin	200	8-1844	0-6-0	15x18"	46"	42975
62		P & R*		8-1860	0-6-0			50625
	Hudson	Baldwin	201	9-1844	0-6-0	15x18"	46"	43825
19		P & R*		10-1850	0-6-0			44100
	Niagara	Baldwin	226	3-1845	0-6-0	15x18"	46"	44100
68		P & R*		10-1861	0-6-0			51425
	Pacific	Baldwin	227	4-1845	0-6-0	15x18"	46"	43820
55		P & R*		5-1859	0-6-0			49725
	Oregon	Baldwin	229	4-1845	0-6-0	15x18"	46"	43820
53		P & R*		12-1859	0-6-0			47700

1871 #	Name	Builder	C. N.	Date	Type	Cyl.	Dr.	Wt.
	Independence	Baldwin Sc.	228	4-1845 1867	0-6-0	15x18"	46"	43820
12	Constitution	Baldwin	231	6-1845	0-6-0	15x18"	46"	43820
13	St. Lawrence	Baldwin	230	5-1845	0-6-0	15x18"	46"	43820
	Champlain	Baldwin Sc.	238	9-1845 1865	0-6-0	16½x18"	46"	45245
	Picayune	P & R Off roster	1	1845 1847	2-2-0	4x8"	36"	7930
	Ariel	P & R	2	2-1846	?	Retired	1856	12825
	Kentucky	Baldwin Off roster	250	4-1846 5-1864	0-8-0	15½x20"	46"	50400
	Alabama	Baldwin Off roster	249	4-1846 1871	0-8-0	15½x20"	46"	50400
	Atlas	Baldwin P & R*	246	3-1846 11-1861	0-8-0	17¼x18"	42"	60750 62550
70	Hercules	Baldwin	247	3-1846	0-8-0	17¼x18"	42"	60750
65	Texas	P & R*		5-1861				63225
		Baldwin	248	4-1846	0-8-0	15½x20"	46"	50400
50	Indiana	P & R*		1858 & 1868				58725
		Baldwin	251	4-1846	0-8-0	15½x20"	46"	50400
	Carolina	Sold—U. S. Military New Castle Co.		R. R. #31, 1862 4-1846a	?	?	?	42075
45	Princeton	P & R*		6-1857				52425
		Baldwin	252	5-1846	0-8-0	15½x20"	46"	50400
202	Amazon	P & R*		11-1868	0-8-0	16x22"	43"	63090
41	Warrior	Baldwin	253	5-1846	0-8-0	15½x20"	46"	50400
		P & R*		6-1856				56690
52	Empire	Baldwin	254	5-1846	0-8-0	15½x20"	46"	50400
		P & R*		10-1858				50400
		Baldwin	255	5-1846	0-8-0	15½x20"	46"	50400
		P & R*		7-1856		Sc. 1865		58250
	Washington	Baldwin	256	5-1846	0-8-0	15½x20"	46"	50400
		Sold—U. S. Military		R. R. #30, 1862				
	Pocahontas	Baldwin	257	6-1846	0-8-0	15½x20"	46"	50400
39	Allegheny	Baldwin*		8-1855	0-8-0			52550
		Baldwin	258	6-1846	0-8-0	15½x20"	46"	50400
21	Yorktown	P & R*		11-1851				53775
		Baldwin	259	6-1846	0-8-0	15½x20"	46"	50400
43	Rio Grande	P & R*		11-1856				55155
		Baldwin	260	6-1846	0-8-0	15½x20"	46"	45225
48	Montezuma	P & R*		1855 & 7-1857				56475
	Black Diamond	Baldwin	261	7-1846	0-8-0	15½x20"	46"	50400
	Florida	P & R**		6-1858		Sc. 1868		63900
		Baldwin	262	7-1846	0-8-0	15½x20"	46"	50400
40	Missouri	P & R*		9-1855				52200
		New Castle Co.		1846	?	?	?	42075
46	Chesapeake	P & R*		7-1857				52425
		Norris Bros.		1847	4-6-0	14½x22"	46"	49060
66	Palo Alto	P & R*	1849	8-1861				59400
		P & R	3	5-1847	?	?	?	46200
	Baltimore	P & R*		11-1857	Off roster	1871		48200
63	Monterey	Ross Winans		6-1847	0-8-0	18x22"	46"	60525
		P & R*		10-1860				61875
16	Novelty	P & R	4	6-1847	?	?	?	44775
		P & R*		11-1857				44775
		P & R	5	6-1847	0-8-0	?	?	47250
		Off roster		11-1850				
54	Maryland	Ross Winans		1847	0-8-0	18x22"	46"	60750
		P & R*		4-1859				61875

1871 #	Name	Builder	C. N.	Date	Type	Cyl.	Dr.	Wt.
	Ohio	Ross Winans		1847	0-8-0	18x22"	46"	62775
51		P & R*		8-1858				61875
	Delaware	Ross Winans		1847	0-8-0	18x22"	46"	60975
20		P & R*	12-1850 & 12-1859					61875
	Witch	P & R	6	10-1847	?	?	?	19125
		Sc.		11-1855				
	Gem	P & R	7	2-1848	?	?	?	11925
		Sold—Mine Hill R. R.,		1850				
	Susquehanna	P & R	8	3-1848	?	?	?	38150
		Sold—Beaver Meadow R. R.,		11-29-1851				
	Buena Vista	P & R	9	4-1848	4-4-0	?	?	40025
		Sold		1863				
	Vera Cruz	P & R	10	4-1848	4-4-0	?	?	37575
		Sc.		8-1857				
	California	P & R	11	5-1848	?	?	?	48375
		P & R*		11-1855				52200
17		P & R	12	7-1848	4-4-0	?	?	37800
		Sold Williamsport & Elmira R. R.,		5-25-1854				
	Vermont	Hinkley	238	6-1849	4-4-0	16x20"	54"	45800
		Sold—C. W. & E. #1,		5-25-1854, became P & R		354—11-1872		
	Massachusetts	Hinkley	241	6-1849	4-4-0	16x20"	54"	45800
		Sold—C. W. & E. #2,		1853, became P & R		355—11-1872		
18	Maine	Hinkley	240	6-1849	4-4-0	16x20"	54"	45800
	Cambridge	D. B. & K.		1850	?	?	?	57375
		Off roster		11-1861				
	Baltic	Baldwin	366	10-1850	0-8-0	17x22"	43"	51425
	Ex-Mine Hill R.	R. #10		8-1849a		Sold—1862		
	Dauphin	Baldwin	333	10-1850	0-8-0	17x22"	43"	53325
	Ex - Pennsylvania	R. R. "Dauphin"		11-1848a		Sold—1862		
	Perry	Baldwin	334	10-1850	0-8-0	17x22"	43"	53550
	Ex - Pennsylvania	R. R. "Perry"		11-1848a		Sold—1862		
	Mohawk	Norris-Schen		1850	4-4-0	?	?	43650
67		P & R*		9-1861				53325
	Genesee	Norris-Schen		1850	4-4-0	?	?	43825
69		P & R*		11-1861				53325
	Patapsco	Ross Winans		1850	0-8-0	?	?	55350
		P & R*		4-1861		Sc. 1868		
	Georgia	Ross Winans		1850	0-8-0	?	?	54225
		P & R*		1857		Sc. 1868		
	Louisiana	Ross Winans		1850	0-8-0	?	?	53775
251		P & R*	1857 & 9-1869					68235
	Minnesota	Ross Winans		1850	0-8-0	?	?	50625
189		P & R*		10-1866				67500
892	Stag	P & R	13	2-1851	?	?	?	32850
	Iowa	Ross Winans		1851	0-8-0	?	?	56690
		Sc.		1868				
	Wisconsin	Ross Winans		1851	0-8-0	?	?	56690
22		P & R*		1-1871		18x22"	43"	69300
	New Jersey	Ross Winans		1852	0-8-0	?	?	57375
296		P & R*		11-1870		18x22"	43"	69300
	Mississippi	Ross Winans		1852	0-8-0	?	?	59625
225		P & R*	10-1861 & 5-1869			18x22"	43"	69300
	Connecticut	Ross Winans		1852	0-8-0	?	?	59625
238		P & R*	9-1860 & 7-1869					60670
	Illinois	P & R	14	5-1852	4-4-0	?	?	62325
		P & R*		5-1861		Sc. 1867		63225
	Utah	Ross Winans		1852	0-8-0	?	?	58950
243		P & R*	1862 & 7-1869			18x22"	43"	69300
	New Hampshire	R. Winans		1852	0-8-0	?	?	59625
277		P & R*		5-1870		18x22"	43"	69300

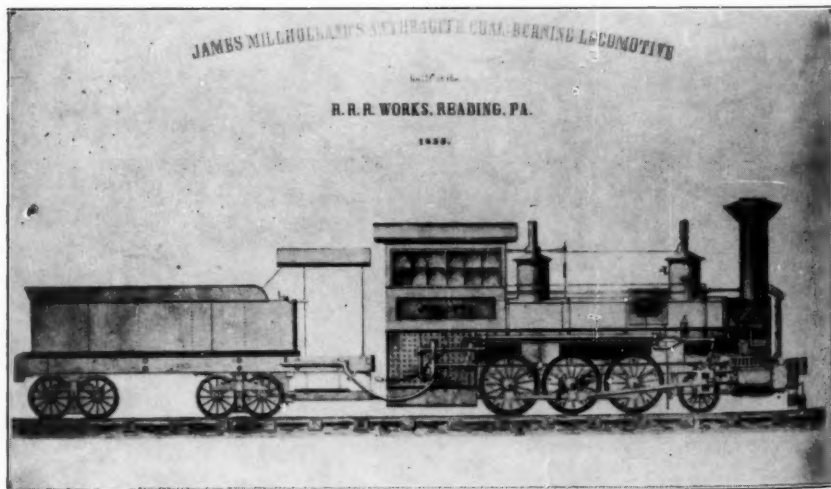
and other...

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—Courtesy of W. A. Lucas.

P. & R. "New Jersey"—Ross Winans, 1852. Shown as partially rebuilt by James Millholland and previous to general rebuilding.

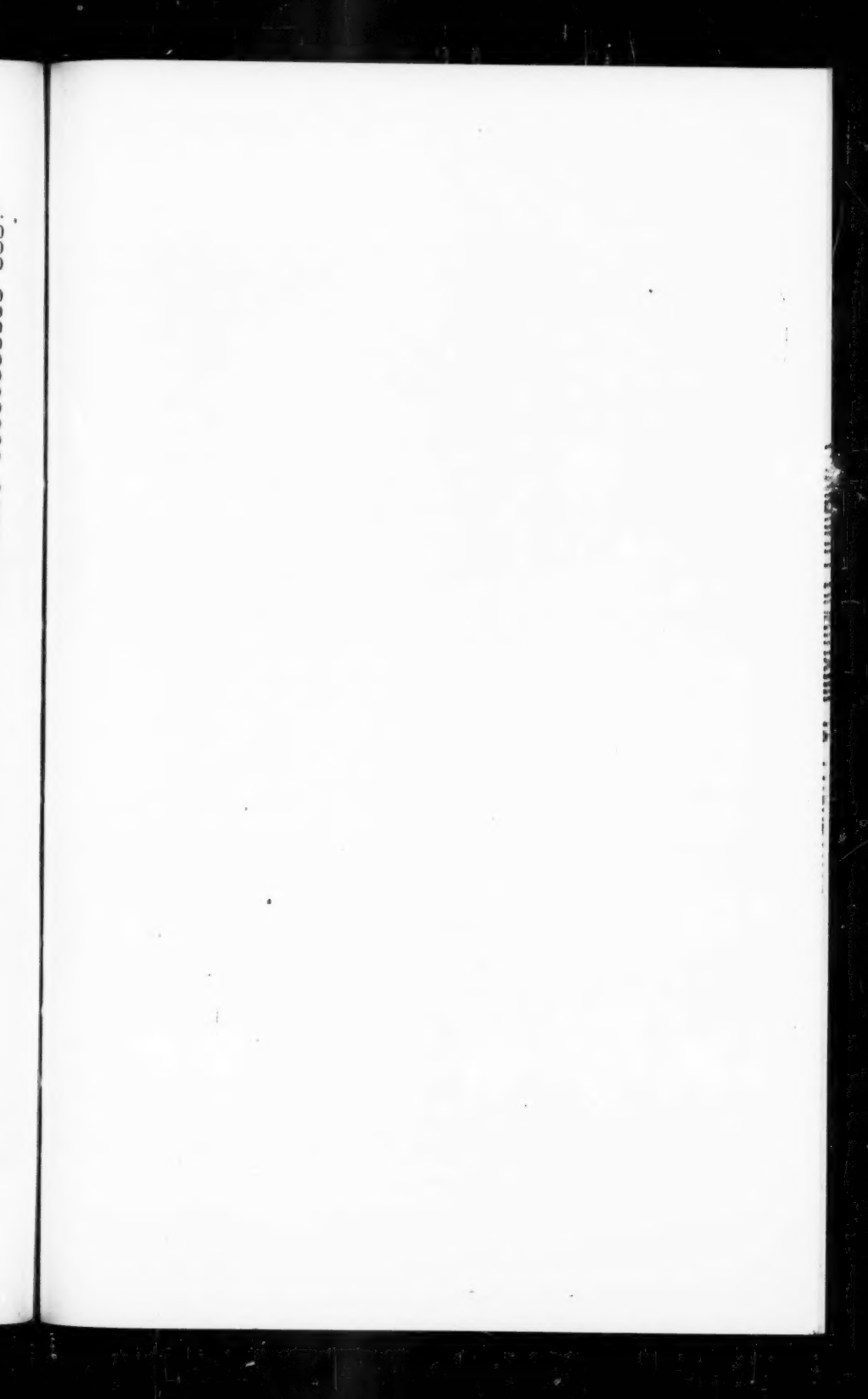


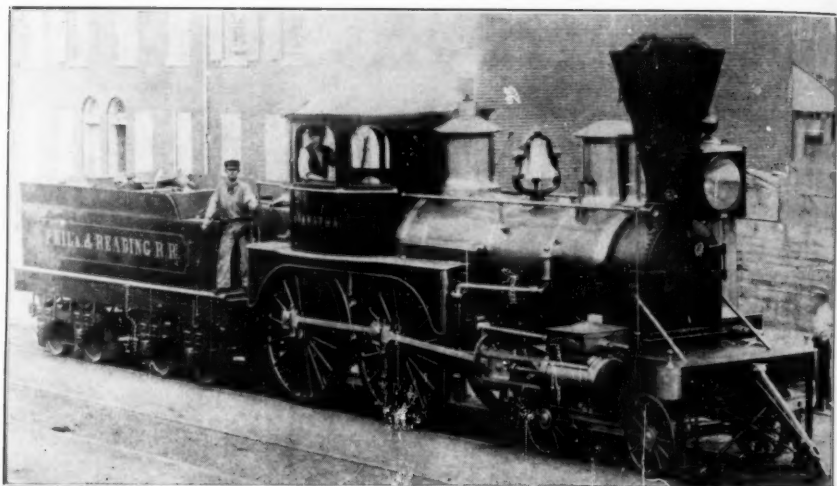
—Courtesy of W. A. Lucas.

P. & R. "Juniatta"—Reading Shops, 1855. Later renamed "Juniata."

1871 #	Name	Builder	C. N.	Date	Type	Cyl.	Dr.	Wt.
	Michigan	P & R	15	6-1852	4-4-0	Sc. 1867		63225
23	Wyomissing	P & R	16	7-1852	2-6-0	?	?	60525
24	Pawnee	P & R	17	8-1852	2-6-0	?	?	60525
	Swatara	P & R	18	8-1852	2-6-0	Ret. 1870		60525
	Perkiomen	P & R	19	9-1852	2-6-0	?	?	60525
59	Phoenix	P & R**		11-1859	2-6-0			71000
	Powhatan	P & R	20	11-1852	2-6-0	Ret. 1869		60525
	Tennessee	P & R	21	11-1852	2-6-0	Ret. 1870		60525
26	Octorara	P & R	22	5-1853	2-6-0	?	?	62775
27	Metamora	P & R	23	6-1853	2-6-0	?	?	62775
28	Aramingo	P & R	24	7-1853	2-6-0	?	?	62775
29	Wissahickon	P & R	25	8-1853	2-6-0	?	?	62775
30	Comanche	P & R	26	9-1853	2-6-0	?	?	62775
31	Seneca	P & R	27	10-1853	2-6-0	?	?	62775
32	Tecumseh	P & R	28	11-1853	2-6-0	?	?	62775
	Saranac	Ross Winans		1854	0-8-0	?	?	60750
280		P & R*		6-1870	0-8-0	18x22"	43"	69300
	Monongahela	Ross Winans		1854	0-8-0	?	?	60750
257		P & R*	6-1861	& 1869	0-8-0	18x22"	43"	69300
	Tamaqua	Ross Winans		1854	0-8-0	?	?	60750
33		P & R*		3-1871	0-8-0	18x22"	43"	69300
	Narragansett	Ross Winans		1854	0-8-0	?	?	60750
290		P & R*	1862	& 4-1870	0-8-0	18x22"	43"	69300
	Colorado	Ross Winans		1854	0-8-0	?	?	60750
274		P & R*	4-1859	& 5-1870	0-8-0	18x22"	43"	69300
	Susquehanna	Ross Winans		1854	0-8-0	?	?	60750
252		P & R*		9-1869		?	?	?
	Chippeway	Ross Winans		1854	0-8-0	?	?	60750
215		P & R*		5-1869	0-8-0	18x22"	43"	69300
	Kennebeck	Ross Winans		1854	0-8-0	?	?	60750
286		P & R*		8-1870	0-8-0	18x22"	43"	69300
	Penobscot	Ross Winans		1854	0-8-0	?	?	60750
279		P & R*		6-1870	0-8-0	18x22"	43"	69300
	Nebraska	Ross Winans		1854	0-8-0	?	?	60750
210		P & R*		3-1869	0-8-0	18x22"	43"	69300
	Santee	Ross Winans		1854	0-8-0	Sc. 1869		60750
	Cumberland	Ross Winans		1854	0-8-0	?	?	60750
247		P & R*	4-1861	& 8-1869		18x22"	43"	69300
	Shenandoah	Ross Winans		1854	0-8-0	?	?	60750
259		P & R*		11-1869	0-8-0	18x22"	43"	69300
	Savannah	Ross Winans		1854	0-8-0	?	?	60750
262		P & R*	1863	& 1-1870	0-8-0	18x22"	43"	69300
	Potomac	Ross Winans		1854	0-8-0	Sc. 1868		60750
	Elmira	R. Norris & Son		1854	4-4-0	?	?	59175
72		P & R*		7-1862				60525
	Auburn	R. Norris & Son	778	1854	4-4-0	?	?	59400
73		P & R*		8-1862				60525
34	Sciota	P & R	29	11-1854	2-6-0	?	?	62775
35	Wabash	P & R	30	11-1854	2-6-0	?	?	62775
	Yellow Springs	Ross Winans		1855	0-8-0	Sc. 1868		60300
	Pine Grove	Danforth & Cooke		2-1855a	?	?	?	51975
		Purchased from P. Chonteau Jr. & Co.						
267		P & R*	11-1860	& 3-1870		?	?	60750
	Rausch Gap	Ross Winans		1855	0-8-0	?	?	60300
297		P & R*		11-1870	0-8-0	18x22"	43"	69300
	Arkansas	Ross Winans		1855	0-8-0	?	?	60300
272		P & R*		5-1870	0-8-0	18x22"	43"	69300
	Pottsville	Ross Winans		1855	0-8-0	?	?	60300
256		P & R*		10-1869	0-8-0	18x22"	43"	69300

1871 #	Name	Builder	C. N.	Date	Type	Cyl.	Dr.	Wt.
	San Francisco	Ross Winans	"	1855	0-8-0	?	?	60300
235		P & R*		6-1869	0-8-0	18x22"	43"	69300
	Mount Vernon	Ross Winans		1855	0-8-0	?	?	60300
255		P & R*		10-1869		?	?	?
	Buffalo	Ross Winans		1855	0-8-0	?	?	60300
260		P & R*		1-1870	0-8-0	18x22"	43"	69300
	Lexington	Ross Winans		1855	0-8-0	?	?	60300
266		P & R*		3-1870	0-8-0	18x22"	43"	69300
	Ashland	Ross Winans		1855	0-8-0	?	?	60300
273		P & R*		3-1870	0-8-0	18x22"	43"	69300
	Rhode Island	Ross Winans		1855	0-8-0	?	?	60300
288		P & R*		8-1870	0-8-0	18x22"	43"	69300
	Richmond	Ross Winans		1855	0-8-0	?	?	60300
291		P & R*		9-1870	0-8-0	18x22"	43"	69300
	Humming Bird	Baldwin	633	1-1855	4-4-0	16x22"	72"	55350
		Sold—U. S. Military	R. R.	#81, 1862				
	Germantown	Ross Winans		1855	0-8-0	?	?	60300
36		P & R*		4-1871	0-8-0	18x22"	43"	69300
	Harrisburg	Ross Winans		1855	0-8-0	?	?	60300
37		P & R*		2-1871	0-8-0	18x22"	43"	69300
	Wilmington	Ross Winans		1855	0-8-0	?	?	60300
213		P & R*		4-1869	0-8-0	18x22"	43"	69300
	Panama	Ross Winans		1855	0-8-0	?	?	60300
205		P & R*		1863 & 1-1869	0-8-0	18x22"	43"	69300
	Blue Bird	Baldwin	641	4-1855	4-4-0	16x22"	66"	55350
		Sold—U. S. Military	R. R.	#51, 1862				
	Albany	Ross Winans		1855	0-8-0	?	?	60300
271		P & R*		5-1870	0-8-0	18x22"	43"	69300
	Charleston	Ross Winans		1855	0-8-0	?	?	60300
253		P & R*		1863 & 10-1869	0-8-0	18x22"	43"	69300
38	Juniata	P & R	31	6-1855	2-6-0	?	?	62775
	Taunton	Taunton	193	6-1855	4-4-0	15x22"	66"	55575
56		P & R*		5-1859 & 5-1871				64350
	Witch	P & R	32	11-1855	?	?	?	19125
		P & R*		1868	2-2-2	8x8"	45"	24075
		Names retained after		12-1871				
	Ariel	P & R	33	8-1856	?	?	?	18675
	Alpha	P & R***		12-1871				18675
	Petrel	Danforth & Cooke		7-1857a	?	?	?	53100
		Purchased from John H. Osborne						
44		P & R*		1863	?	?	?	63200
49	Vera Cruz	P & R	34	8-1857	?	?	?	59625
57	Minnehaha	P & R	35	6-1859	4-4-0	?	?	56690
58	Hiawatha	P & R	36	6-1859	4-4-0	?	?	56690
61	Active	Baldwin	942	7-1860	0-4-0	11x16"	36"	32400
64	Fawn	P & R	37	12-1860	4-4-0	?	?	40500
71	Union	P & R	38	3-1862	4-4-0T (?)	?	?	78075
	Venus	P & R	39	10-1862	4-4-0	?	?	51425
	Dove	P & R**		1864				43425
75	Mars	P & R	40	11-1862	4-4-0	?	?	51425
	Celeste	Ross Winans		12-1862				
91		P & R*		9-1863 & 5-1871	0-8-0	18x22"	43"	69300
76	Dacotah	P & R	41	1-1863	4-4-0	?	?	56690
	Dakota	P & R***		1868				
77	Nevada	P & R	42	3-1863	4-6-0	18x22"	46"	68600
78	Wyoming	P & R	43	3-1863	4-6-0	18x22"	46"	68600
79	Anthracite	L S R R		4-1863a	?	?	?	50850
80	Beaufort	Norris-Phila		4-1863a	?	?	?	43650
81	Caroline	L S R R		4-1863a	?	?	?	53325





—Courtesy of the Reading Co.

P. & R. "Hiawatha"—Reading Shops, 1859.

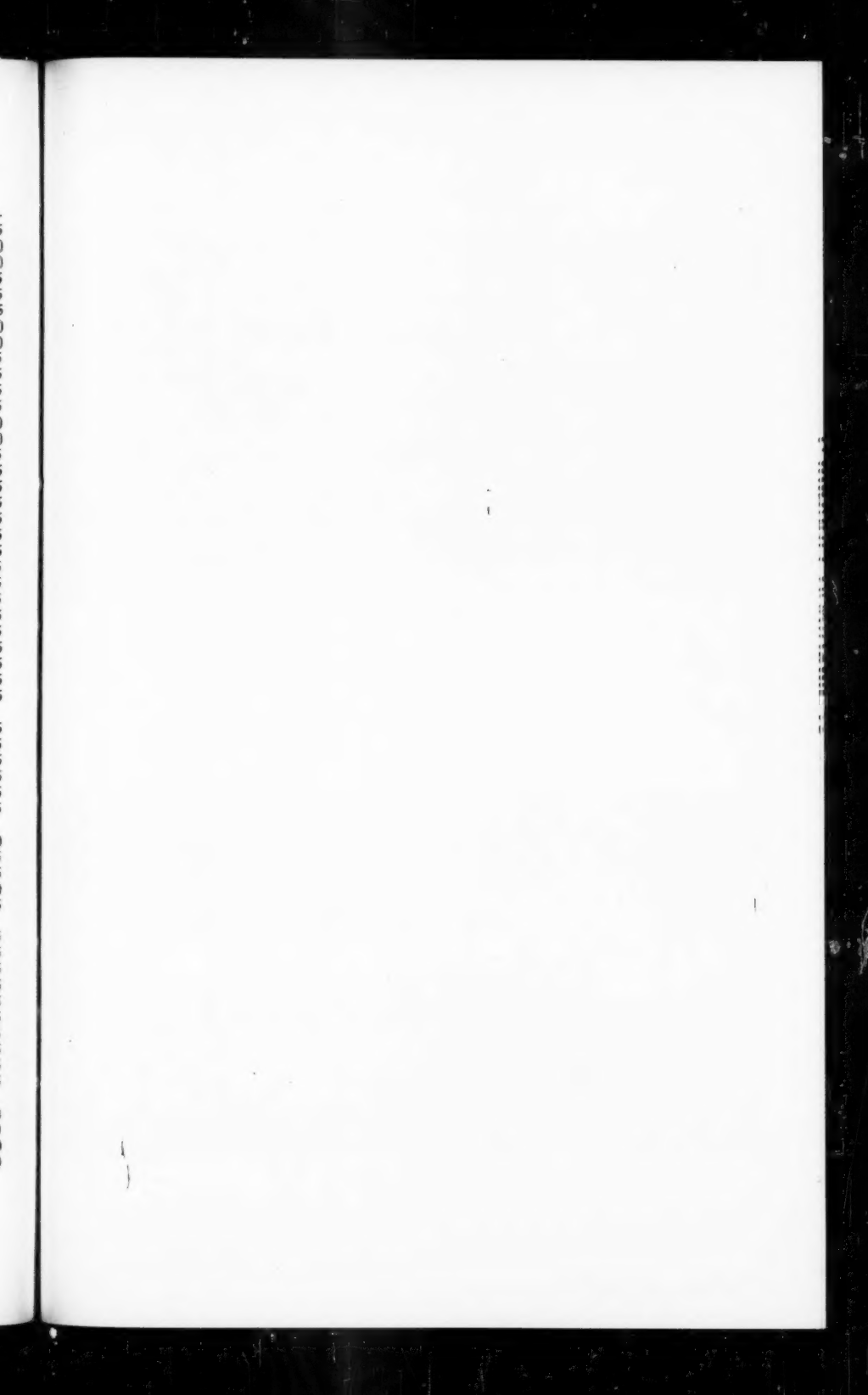


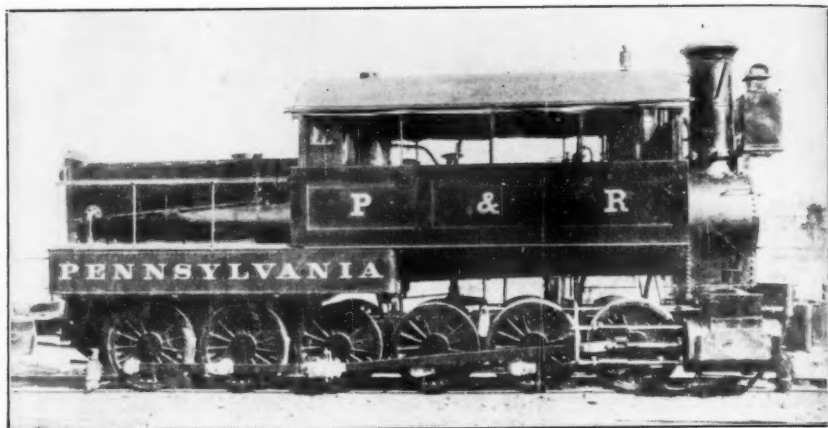
The first Reading "Gun-boat." Reading Shops, 1863.

1871

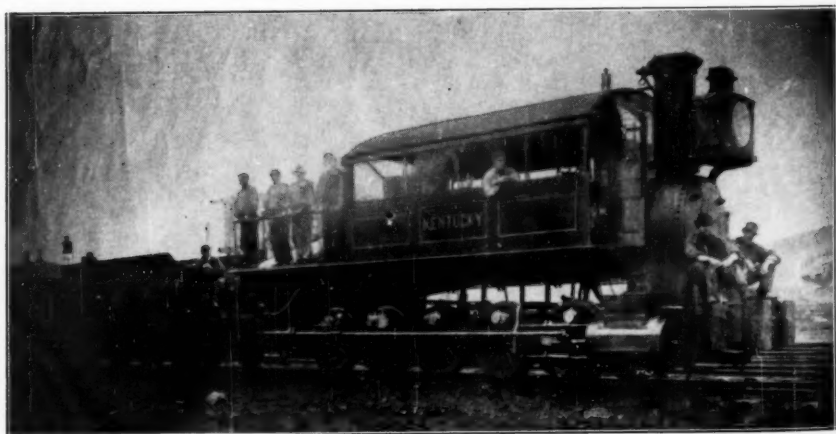
#	Name	Builder	C. N.	Date	Type	Cyl.	Dr.	Wt.
82	Mountaineer	P & R	44	4-1863	0-8-0T	?	?	73350
83	Ringgold	Norris-Phila		4-1863a	?	?	?	64350
	Marion	Norris-Phila		4-1863a	?	?	?	49275
179		P & R*		4-1866	4-4-0			56250
84	Sumpter	Norris-Phila		4-1863a	?	?	?	42200
	Catawissa	Edward Bury		1833	0-4-0			18900
		Sold—American Dredging Co.,		11-17-1871				
25	Ottawa	Baldwin	779	8-1857	0-8-0	18x20"	43"	66375
	Gén'l Taylor	Baldwin	290	4-1847	0-6-0	13x18"	42"	38475
		Sc.		1869				
	Port Clinton	Norris		4-1863a	?	?	?	48375
		Sc.		1869				
Except P & R #82, the above 11 engines came from the L S R R								
85	Idaho	P & R	45	5-1863	0-8-0T	18x22"	36"	72100
86	Eldorado	P & R	46	6-1863	4-6-0	18x22"	46"	69075
87	Sonora	P & R	47	6-1863	4-6-0	18x22"	46"	69075
88	Arizona	P & R	48	7-1863	4-6-0	18x22"	46"	69075
89	Antietam	P & R	49	8-1863	4-6-0	18x22"	46"	69075
90	Mariposa	P & R	50	8-1863	4-6-0	18x22"	46"	69075
92	Monitor	P & R	51	9-1863	4-6-0	18x22"	46"	69075
	Pennsylvania	P & R	52	9-1863	0-12-0T	20x26"	43"	100320
93		P & R		1870	0-10-0T			80775
94	Tip Top	Baldwin	871	8-1859	0-4-0T	11x16"	36"	35775
		Pur. from G. D. Coleman		9-1863				
95	Chicago	P & R	53	11-1863	4-6-0	18x22"	46"	69075
96	Gettysburg	P & R	54	11-1863	4-6-0	18x22"	46"	69075
97	Lebanon	P & R	55	11-1863	4-6-0	18x22"	46"	69075
98	Luzerne	P & R	56	11-1863	4-6-0	18x22"	46"	69075
99	Chattanooga	P & R	57	1-1864	4-6-0	18x22"	46"	68850
100	Vicksburg	P & R	58	1-1864	4-6-0	18x22"	46"	68850
101	Washington	P & R	59	4-1864	4-4-0	?	?	56690
102	Kentucky	P & R	60	5-1864	0-10-0	20x26"	42 3/4"	82575
130	Eik	Baldwin	1174	10-1863	0-8-0	20x22"	43"	78750
		Ex Catawissa R. R.		#10, 8-1864a				
131	Pittsburg	P & R	61	8-1864	4-6-0	18x22"	46"	68850
	Annapolis	H B & Co.		8-1864a	?	?	?	72225
		Sc.		1870				
157	Lancaster	P & R	62	8-1864	4-6-0	18x22"	46"	68850
132	Cincinnati	P & R	63	9-1864	4-6-0	18x22"	46"	68850
	Hagerstown	H B & Co.		9-1864a	?	?	?	72225
133		P & R*		5-1871	0-8-0	18x22"	43"	69300
	Bee	E S Norris		10-1864a	4-4-0	?	?	52425
245		P & R*		8-1869	4-4-0			54900
	Hornet	E S Norris		10-1864a	4-4-0	?	?	52200
254		P & R*		10-1869	4-4-0			54900
	Havre de Grace	H B & Co.		10-1864a	?	?	?	72225
295		P & R*		10-1870	0-8-0	18x22"	43"	69300
134	Wasp	E S Norris		10-1864a	4-4-0	?	?	52425
135	Cleveland	P & R	64	11-1864	4-6-0	18x22"	46"	68850
136	Detroit	P & R	65	11-1864	4-6-0	18x22"	46"	68850
137	Milwaukee	P & R	66	11-1864	4-6-0	18x22"	46"	68850
	Cricket	E S Norris		11-1864a	4-4-0	?	?	52425
209		P & R*		3-1869	4-4-0			54900
138	Springfield	P & R	67	11-1864	4-6-0	18x22"	46"	68850
139	Toledo	P & R	68	11-1864	4-6-0	18x22"	46"	68850
140	Ant	Baldwin	1282	9-1864	0-4-0T	11x16"	36"	39600
	Ex Bellefonte & Snowshoe R. R.			"Monitor"—12-1864a				
	Copley	Baldwin	1124	4-1863	0-6-0	15x18"	44"	45000
	Ex Ironton R. R.			"Copley"—12-1864a. Sold East Penna R. R. #14				
	"Lehigh" 11-30-1867, name retained when road acquired by F & R 5-1869							

1871 #	Name	Builder	C. N.	Date	Type	Cyl.	Dr.	Wt.
141	Louisville	P & R	69	1-1865	4-6-0	18x22"	46"	69075
142	Lafayette	P & R	70	1-1865	4-4-0	?	?	56690
143	Kosciusko	P & R	71	2-1865	4-4-0	?	?	56690
144	New Orleans	P & R	72	2-1865	4-6-0	18x22"	46"	69075
145	Dupont	Norris-Phila		3-1865a	4-6-0	?	?	65475
	Meade	Norris-Lanc		3-1865a	4-6-0	?	?	67275
200		P & R*		9-1866				72450
146	Farragut	Norris-Phila		3-1865a	4-6-0	?	?	70650
147	Foote	Norris-Phila		3-1865a	4-6-0	?	?	65475
148	Grant	Norris-Lanc		3-1865a	4-6-0	?	?	67275
149	Porter	Norris-Phila		3-1865a	4-6-0	?	?	65475
	Sherman	Norris-Lanc		3-1865a	4-6-0	?	?	67275
150	Beaver	P & R	73	4-1865	?	?	?	45450
151	Ferret	P & R	74	4-1865	?	?	?	45450
152	Sheridan	Norris-Lanc		4-1865a	4-6-0	?	?	67275
153	Dubuque	P & R	75	5-1865	4-6-0	18x22"	46"	69075
154	Galena	P & R	76	5-1865	4-6-0	18x22"	46"	69075
155	Cairo	P & R	77	6-1865	4-6-0	18x22"	46"	69075
156	Kenosha	Norris-Lanc		7-1865a	4-6-0	18x22"	?	69075
186	Peoria	Norris-Lanc		7-1865a	4-6-0	18x22"	?	69075
158	Lacrosse	Norris-Lanc		7-1865a	4-6-0	18x22"	46"	69075
159	Montana	P & R	78	7-1865	4-6-0	18x22"	46"	69075
160	Keokuk	Norris-Lanc		8-1865a	4-6-0	18x22"	46"	69075
161	Memphis	Norris-Lanc		8-1865a	4-6-0	18x22"	46"	69075
162	Muscatine	Norris-Lanc		8-1865a	4-6-0	18x22"	46"	69075
163	Nashville	Norris-Lanc		8-1865a	4-6-0	18x22"	46"	69075
164	Osage	P & R	79	8-1865	4-6-0	18x22"	46"	69075
165	Racine	P & R	80	8-1865	4-6-0	18x22"	46"	69075
166	Saint Louis	P & R	81	8-1865	4-6-0	18x22"	46"	69075
1092	Oshkosh	Norris-Lanc		9-1865a	4-6-0	18x22"	46"	69075
	Sold—Reading &	Columbia R. R.		5-1868				
167	Atlanta	Norris-Lanc		9-1865a	4-6-0	18x22"	46"	69075
168	Natchez	Norris-Lanc		9-1865a	4-6-0	18x22"	46"	69075
169	Augusta	P & R	82	10-1865	4-6-0	18x22"	46"	69075
170	Iroquois	P & R	83	10-1865	4-6-0	18x22"	46"	69075
171	Kearsarge	P & R	84	10-1865	4-6-0	18x22"	46"	69075
345	Boston	P & R	85	10-1865	4-6-0	18x22"	46"	69075
	Sold—Schuylkill &	Susquehanna R. R.		12-1865, reacquired	6-1872			
172	Lincoln	P & R	86	11-1865	4-4-0	?	?	56690
173	Mobile	Norris-Lanc		11-1865a	4-6-0	18x22"	46"	69075
174	Portland	P & R	87	11-1865	4-6-0	18x22"	46"	69075
175	Jackson	P & R	88	1-1866	4-4-0	?	?	56690
1090	Fernandina	E S Norris-Lanc		1-1866	4-6-0	18x22"	46"	69075
	Sold—Reading &	Columbia R. R.		6-1866				
184	Brooklyn	E S Norris-Lanc		1866	4-6-0	18x22"	46"	69075
185	Concord	E S Norris-Lanc		1866	4-6-0	18x22"	46"	69075
176	Norfolk	E S Norris-Lanc		1866	4-6-0	18x22"	46"	69075
177	Girard	P & R	89	3-1866	0-10-0	20x26"	43"	82575
178	Milton	E S Norris Lanc		1866	4-6-0	18x22"	46"	69075
180	Galveston	E S Norris Lanc		1866	4-6-0	18x22"	46"	69075
181	Newbern	E S Norris Lanc		1866	4-6-0	18x22"	46"	69075
182	Pensacola	E S Norris Lanc		1866	4-6-0	18x22"	46"	69075
183	Preston	P & R	90	5-1866	0-10-0	20x26"	43"	82575
	Gold Mine	Ross Winans		6-1866a	0-8-0	?	?	60075
		Pur. from Schuylkill &						
294		P & R*		10-1870	0-8-0	18x22"	43"	69300
187	Wharf Rat	P & R	91	7-1866	0-4-0	9x16"	34"	26550
188	Mink	P & R	92	8-1866	0-4-0	9x16"	34"	26550
190	Winona	P & R	93	11-1866	4-4-0	?	?	56690





P. & R. "Pennsylvania"—Reading Shops, 1863.



P. & R. "Kentucky"—Reading Shops, 1864.

1871 #	Name	Builder	C. N.	Date	Type	Cyl.	Dr.	Wt.
	America	P & R	94	11-1866	4-6-0	18x22"	46"	69075
	Sold—East Penna.	R. R.		12-1866				
1091	Columbia	P & R	95	1867	4-4-0	?	?	56690
	Sold—Reading &	Columbia R. R.		3-1867				
191	Illinois	P & R	96	5-1867	4-4-0	17x22"	61½"	62525
	Transit	P & R	97	7-1867	2-2-2	8x8"	45"	21375
192	Michigan	P & R	98	8-1867	4-4-0	17x22"	61½"	62525
193	Otter	P & R	99	9-1867	0-4-0	9x16"	34"	25875
194	Omaha	P & R	100	10-1867	4-4-0	?	?	56690
		P & R	101	10-1867	4-6-0	18x22"	46"	69075
	Sold—East Penna	R. R.		1867				
		P & R	102	11-1867	4-4-0	?	?	56690
	Sold—East Penna	R. R. "Tacony"		1867				
195	Seal	P & R	103	10-1867	0-4-0	9x16"	34"	25875
196	Alaska	P & R	104	4-1868	4-4-0	?	?	56690
197	Saxon	P & R	105	5-1868	0-10-0	20x26"	43"	85500
198	Norman	P & R	106	7-1868	0-10-0	20x26"	43"	85500
199	Black Diamond	P & R	107	9-1868	?	?	?	67500
201	Potomac	P & R	108	11-1868	0-8-0	18x22"	43"	69525
203	Perkiomen	P & R	109	11-1868	4-4-0	17x22"	61½"	65475
204	Yellow Springs	P & R	110	11-1868	0-8-0	18x22"	43"	69525
206	Georgia	P & R	111	2-1869	?	?	?	68235
207	Spartan	P & R	112	2-1869	4-6-0	18x22"	46"	72450
211	Peruvian	P & R	113	3-1869	4-6-0	18x22"	46"	72450
212	Canadian	P & R	114	4-1869	4-6-0	18x22"	46"	72450
208	Blendon	Baldwin		5-1869 _a	4-6-0	17½x22"	50"	68625
214	Arabian	P & R	115	5-1869	4-6-0	18x22"	46"	72450
216	Decatur	Rogers		5-1869 _a	?	?	?	58250
217	Dauphin	P & R		5-1869 _a	4-6-0	18x22"	46"	72450
218	Easton	Rogers		5-1869 _a	?	?	?	54000
219	Essex	Rogers		5-1869 _a	?	?	?	58250
220	Franklin	Rogers		5-1869 _a	?	?	?	58250
221	Fleetwood	Baldwin		5-1869 _a	4-6-0	17½x22"	50"	68625
222	Hanover	Rogers		5-1869 _a	?	?	?	54000
223	Jefferson	P & R		5-1869 _a	4-6-0	18x22"	46"	72450
224	Lehigh	Baldwin	1124	4-1863	0-6-0	15x18"	44"	45000
		E. P. R. R. #14						
226	Madison	Norris-Phila	948	5-1869 _a	4-4-0	?	?	57375
		E. P. R. R. #1						
227	Shamrock	Baldwin		5-1869 _a	4-6-0	17½x22"	50"	68625
228	Trenton	Norris-Lanc		5-1869 _a	4-6-0	18x22"	46"	72450
		E. P. R. R. #10						
229	Tacony	P & R	102	1867	4-4-0	?	?	56690
	Nos. 208, 216-224,	226-229 rec'd from East Penna. R. R.,		5-1869				
230	Australia	Baldwin	1881	5-1869	4-6-0	18x22"	46"	72450
231	Belgian	P & R	116	6-1869	4-6-0	18x22"	46"	72450
232	Bolivia	Baldwin	1885	5-1869	4-6-0	18x22"	46"	72450
233	Caledonia	Baldwin	1882	5-1869	4-6-0	18x22"	46"	72450
234	Persian	P & R	117	6-1869	4-6-0	18x22"	46"	72450
236	America	Baldwin	1893	5-1869	4-6-0	18x22"	46"	72450
237	Bavaria	Baldwin	1891	5-1869	4-6-0	18x22"	46"	72450
239	Cambria	Baldwin	1900	6-1869	4-6-0	18x22"	46"	72450
240	Geneva	Baldwin	1914	6-1869	4-6-0	18x22"	46"	72450
241	Hungarian	P & R	118	7-1869	4-6-0	18x22"	46"	72450
242	Havana	Baldwin	1910	6-1869	4-6-0	18x22"	46"	72450
244	Vienna	Baldwin	1907	6-1869	4-6-0	18x22"	46"	72450
246	Brazilian	P & R	119	8-1869	4-6-0	18x22"	46"	72450
248	Caspian	P & R	120	8-1869	4-6-0	18x22"	46"	72450
249	Valentia	Baldwin	1915	6-1869	4-6-0	18x22"	46"	72450
250	Corsican	P & R	121	9-1869	4-6-0	18x22"	46"	72450

1871 #	Name	Builder	C. N.	Date	Type	Cyl.	Dr.	Wt.
258	Minerva	P & R	122	11-1869	0-6-0	16x18"	43"	60800
261	Norwegian	P & R	123	1-1870	4-6-0	18x22"	46"	72450
263	Austrian	P & R	124	3-1870	4-6-0	18x22"	46"	72450
264	Badger	P & R	125	3-1870	0-4-0	9x16"	34"	25500
265	Castilian	P & R	126	3-1870	4-6-0	18x22"	46"	72450
268	Weasel	P & R	127	3-1870	0-4-0	9x16"	34"	25500
269	Russian	P & R	128	4-1870	4-6-0	18x22"	46"	72450
270	Sable	P & R	129	4-1870	0-4-0	9x16"	34"	25500
275	Cuban	P & R	130	5-1870	0-6-0	18x22"	46"	72450
276	Diana	P & R	131	5-1870	0-6-0	16x18"	43"	64000
278	Siberian	P & R	132	5-1870	4-6-0	18x22"	46"	72450
281	Vesta	P & R	133	6-1870	0-6-0	16x18"	43"	64000
282	Athenian	P & R	134	7-1870	4-6-0	18x22"	46"	72450
283	Lippincott	Baldwin	589	5-1854	0-6-0	13½x18"	42"	42075
284	Navigation	Baldwin	544	8-1853	0-6-0	13½x18"	42"	41175
285	J R Worrell	Baldwin	758	5-1857	0-6-0	13½x18"	43"	39375
Nos. 283-285 were received from the Schuylkill Navigation Co., and placed on the road July, 1870								
287	Mexican	P & R	135	8-1870	4-6-0	18x22"	46"	72450
289	Bohemian	P & R	136	9-1870	4-6-0	18x22"	46"	72450
292	Roman	P & R	137	9-1870	4-6-0	18x22"	46"	72450
293	Vulcan	P & R	138	9-1870	0-6-0	16x18"	43"	64000
298	Belmont	Baldwin	1137	5-1863	4-4-0	13½x24"	56"	48000
299	Bridgeport	Baldwin	1730	6-1868	0-6-0	15x18"	56"	52875
300	Chestnut Hill	Baldwin	2011	11-1869	4-4-0	13x24"	57¾"	45225
301	Conshohocken	Baldwin	744	2-1857	4-4-0	13½x24"	54"	42700
302	Carlisle	Baldwin	1211	2-1864	4-4-0	13½x24"	60"	45000
303	E C Dale	Baldwin	1592	3-1867	0-6-0	15x18"	44"	52000
304	Downingtown	Baldwin	530	5-1853	0-6-0	12½x18"	42"	41800
305	Mount Airy	Baldwin	1991	10-1869	0-6-0	15x18"	42"	52875
306	Manayunk	Baldwin	692	4-1856	4-4-0	13½x24"	54"	42700
307	Manatawna	Baldwin	1213	2-1864	4-4-0	13½x24"	60"	45000
308	Nicetown	Baldwin	1700	2-1868	4-4-0	13x24"	56"	45225
309	Norristown	Baldwin	593	5-1854	0-6-0	14½x18"	42"	41800
310	Oakland	Baldwin	1424	11-1865	4-4-0	14x24"	54"	53000
311	Plymouth	Baldwin	2161	6-1870	4-6-0	16x24"	54"	72675
312	Quaker City	Baldwin	772	7-1857	4-4-0	13x24"	60"	43800
313	Rockland	Baldwin	687	3-1856	0-6-0	14½x18"	42"	41800
314	Roxborough	Baldwin	843	3-1859	4-4-0	13x24"	54"	44800
315	Superior	Baldwin	616	9-1854	4-4-0	13½x24"	54"	42700
316	Stanhope	Baldwin	721	10-1856	4-4-0	12½x24"	60"	43800
317	Spring Mill	Baldwin	729	11-1856	4-4-0	13½x24"	54"	42700
318	Thorndale	Baldwin	1679	12-1867	0-6-0	15x18"	44"	52000
319	Tioga	Baldwin	714	8-1856	4-4-0	12½x24"	60"	43800
320	Wayne	Baldwin	1908	6-1869	4-4-0	13x24"	57¾"	45225

Of the above numbers, 298-320 were received from the Philadelphia, Germantown & Norristown R. R., and placed on the P & R Dec. 1870. Some of the P. G. & N. engines carried names the same as on the P & R and these were renamed as follows:

P & R	P G & N	P & R	P G & N
"Bridgeport"	"Wyoming";	"Chestnut Hill"	"Dakota";
"Carlisle"	"Wissahickon";	"Mount Airy"	"Oregon";
"Oakland"	"U. S. Grant";	"Rockland"	"America";
"Stanhope"	"Germantown";	"Thorndale"	"Omaha";
"Wayne"	"Alaska";	"Nicetown"	"Montana";
"Belmont"	"Union";		

1871								
#	Name	Builder	C. N.	Date	Type	Cyl.	Dr.	Wt.
321	Grecian	P & R	139	3-1871	4-6-0	18x22"	46"	72450
322	Italian	P & R	140	5-1871	4-6-0	18x22"	46"	72450
323	Denver	P & R	141	6-1871	4-4-0	15x20"	61"	68000
324	Duluth	P & R	142	7-1871	4-4-0	15x20"	61"	68000
325	Ionian	P & R	143	7-1871	4-6-0	18x22"	46"	72450
326	Saturn	P & R	144	7-1871	0-6-0	16x18"	43"	64000
327	Moravian	P & R	145	8-1871	4-6-0	18x22"	46"	72450
328	Sitka	P & R	146	8-1871	4-4-0	15x20"	61"	68000
329	Corinthian	P & R	147	8-1871	4-4-0	15x20"	61"	68000
330	Oneida	P & R	148	9-1871	4-4-0	15x20"	61"	68000
331	Syrian	P & R	149	10-1871	4-6-0	18x22"	46"	72450
332	Ermine	P & R	150	10-1871	0-4-0	9x16"	34"	25500
333	Mole	P & R	151	10-1871	0-4-0	9x16"	34"	25500
334	Aurora	P & R	152	10-1871	0-6-0	16x18"	43"	64000
335	Apollo	P & R	153	11-1871	0-6-0	16x18"	43"	64000
336	Caucasian	P & R	154	11-1871	4-6-0	18x22"	46"	72450
337	Hibernian	P & R	155	11-1871	4-6-0	18x22"	46"	72450
338	Mongolian	P & R	156	11-1871	4-6-0	18x22"	46"	72450

NOTE:—The locomotives "Dauphin" and "Perry" were both built for the Pennsylvania R. R., by Baldwin in Nov. 1848 and both are found in the roster for 1850 of that road. It seems evident that the P. R. R. disposed of them to the P & R as they entered service on the latter in Oct. 1850. In a like manner, the "Baltic" was built for the Mine Hill R. R. as their #10 in Aug. 1849 and here again, we find this locomotive entering the service of the P & R in Oct. 1850, probably through purchase.

READING LOCOMOTIVES

1871-1900

Although the second period of the Philadelphia and Reading locomotive history has been selected to start with the substitution of numbers for names, there was no pronounced development or change of locomotive design for Millholland's standard classes were still being constructed. It was not until 1877 however, with the introduction of the Wootten boiler, that the next radical change took place.

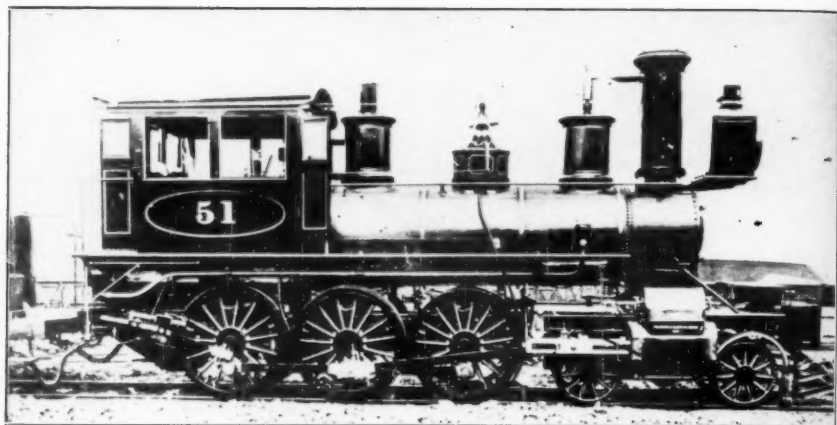
The search for a satisfactory firebox in which to burn anthracite waste or "culm," had been carried on rather independently on the various hard coal roads. In preparing anthracite for market, there had always been a large amount of breakage and waste that was dumped on refuse piles near the breakers. Much of this so called waste was coal too small for domestic sale. The huge piles continued to grow year by year, and no doubt spurred the idea of using this "dirt cheap" fuel, mined without the payment of royalties.

John E. Wootten, General Manager of the Philadelphia and Reading, realized that important economies could be made if "culm" could be successfully used. Accordingly, he patented a specially designed boiler with a much larger grate area than was then in use in locomotives burning lump anthracite. To use "culm" it was necessary to carry a thin fire and have a light draft in order to avoid blowing fuel off the grate. Wootten placed the firebox of the boiler entirely above the driving wheels so that the width was limited only by the loading gauge. A combustion chamber extended forward into the boiler barrel, and was separated from the firebox proper by a bridge wall. The grate consisted of water tubes and cast iron bars, and the junction of the firebox and combustion chamber was so arranged that, even with the grate placed entirely above the driving wheels, it was not necessary to raise the boiler to an excessive height above the rails. Owing to the width of the firebox, two firedoors were provided.

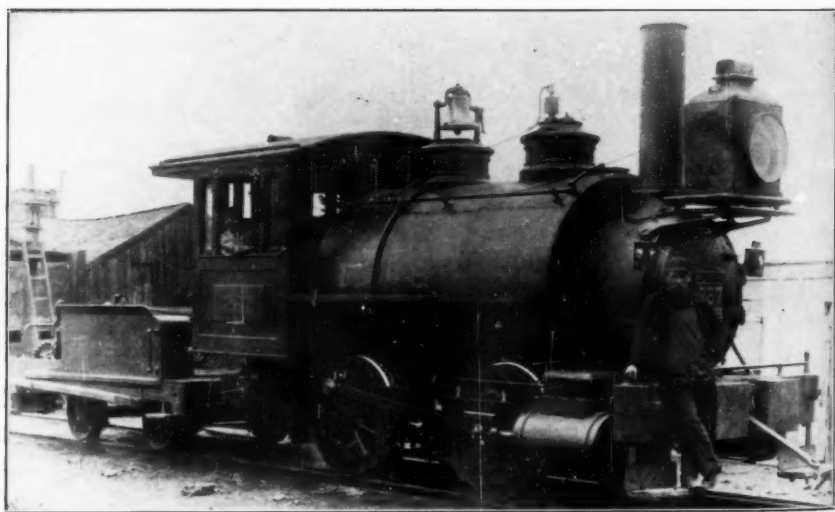
The crown sheet of the firebox was horizontal, but the roof sheet sloped toward the rear at a fairly steep angle, providing very little steam space at the back. The mud ring, or water space frame, was made of flanged plates shaped like an inverted U, and carefully fitted and riveted to the inside and outside firebox sheets. A short smokebox was used with a variable exhaust nozzle and there was a register in the front door for the admission of air.*

This was briefly, the original design of the Wootten boiler, but there were certain features that soon gave trouble. On account of the sloping roof sheet, staybolt breakages were frequent. The flanged mud ring was another source of weakness as well as the raised water space at the back of the combustion chamber. These defects of design were remedied by 1890 through the efforts of the Baldwin Locomotive Works and L. B. Paxson, Superintendent of Motive Power.

*Data from "The Development of Anthracite-Burning Locomotive," by Paul T. Warner, R & LHS Bulletin #52.



P. & R. #51—Reading Shops, 1873.



—Courtesy of John G. Smith, Jr.

P. & R. #267—Reading Shops, 1883.

The first locomotive to be built with a Wootten boiler and firebox, patented in 1877, was #408, a 4-6-0 type built by the Reading Shops in January of that year. The locomotive possessed many features of the *Gunboat* class, even with the cab over the firebox. The #408 proved successful and another of similar design, #412 was sent to Europe and exhibited at the Paris Exposition of 1878. It was subsequently tried on the Northern Railway of France and on several Italian railroads. On account of the restricted clearance limits on the Northern Railway of France, it was necessary before trying the locomotive on that line, to move the cab ahead of the firebox so it could be lowered. This locomotive then, was probably the first of many locomotives nick-named "Camelbacks" on the Reading and "Camelbacks" or "Mother Hubbards" on other roads employing them.

The successful performance of #408 and others, plus the economy of using waste fuel marked the beginning of an epoch in which the entire design and appearance of Reading locomotives were radically changed, while there was a notable increase in size and power of the machines. For example, passenger as well as freight locomotives were soon built with Wootten boilers and in December, 1878, #122, the first 4-4-0 to be so designed was built at Reading. In 1880 #411 and #506 were also built at Reading, and at that time were the heaviest passenger locomotives constructed in the United States, weighing almost forty-four long tons without tender. They also trimmed the running time between Philadelphia and New York, their fastest schedule, including one stop and three slowdowns, allowed 64 minutes for 54.9 miles between Wayne Junction and Bound Brook. On this run it was necessary to maintain a speed of 72 miles per hour for eight miles. Lump anthracite instead of "culm" was used to safeguard against steam failures and the locomotive was manned by two firemen as well as the engineer, the third person known as the "Furnace Door Opener." Thirty-five locomotives similar to #122, #411, and #506 with their typical four windowed cabs, were built at Reading until 1884, when the shop turned to making the fireboxes with horizontal roof sheets and three windowed cabs. The firebox and boiler changes permitted a higher boiler pressure and tractive effort without changing the over-all dimensions.

It is notable that #206 built at Reading in July, 1886 and having the improved Wootten boiler, ran a mile on the New York Branch with three cars near Neshaminy Falls, Pennsylvania, $39\frac{3}{4}$ seconds, equivalent to 90.5 miles per hour. Five consecutive miles were covered at an average speed of 87 miles per hour on the same run. The record had been formerly held by #366, built at Reading Shops February, 1884, having a Wootten boiler of original design. This locomotive in March, 1890 ran 89 miles in 85 minutes between Philadelphia and New York without special preparations.

The first Baldwin built locomotives with Wootten boilers and the first Consolidation 2-8-0 type, used on the Reading, were delivered in 1880. They proved very successful and a total of 138 of those later classified I-1, were built. The Reading has since developed the Consolidation type to a high degree and in later years proved to be an important factor in the limited use of the trailer truck on the freight locomotives.

Wootten boilers were soon applied to 0-4-0, 0-6-0, and 0-8-0 types. The 0-8-0's proved useful on the heavy grades in the coal regions until the coming of the Consolidations. To give some idea of the widespread and immediate use of the Wootten boiler, below are listed the first twenty-five built at Reading Shops:

408	4-6-0	1-1877	25	0-8-0	5-1879
88	4-6-0	9-1877	65	0-8-0	5-1879
412	4-6-0	3-1878	105	0-8-0	6-1879
50	0-8-0	3-1878	4	0-6-0	8-1879
80	0-8-0	4-1878	7	0-6-0	8-1879
42	0-6-0	6-1878	8	0-6-0	10-1879
47	0-6-0	8-1878	113	4-4-0	10-1879
70	0-6-0	10-1878	118	4-4-0	11-1879
104	0-6-0	11-1878	119	4-6-0	12-1879
122	4-4-0	12-1878	60	4-6-0	12-1879
1	0-4-0	3-1879	72	4-6-0	2-1880
2	0-4-0	4-1879	43	4-6-0	3-1880
			411	4-4-0	(5-1880)

With the burning of "culm" so successfully, many locomotives on the "hard coal" roads, originally built with narrow fireboxes, were rebuilt with boilers of the Wootten or modified Wootten types.

In 1888 the motive power department turned an about face and reverted to long, narrow fireboxes to burn lump anthracite, while the wide-firebox Wootten boiler locomotives were proving successful. Thirteen 4-4-0's were received from Baldwin that year, in addition to fifteen Consolidations, that were in a few years rebuilt with Wootten boilers. After these two lots, motive power orders were for wide firebox locomotives for the next ten years.

There is an interesting sidelight in connection with locomotives #960-966, part of the thirteen noted above. When #961 was put on the scales, at the Baldwin plant, on April 16, 1888, she weighed 91,300 pounds on drivers and 122,900 pounds total. On specification she was to weigh 77,000 pounds on drivers with a total weight of 113,000 pounds. Naturally the railroad objected to the excess weight and consequently #960-966 were equipped with straight top boilers, instead of wagon tops, and the number of tubes were reduced, in all bringing the figure down to 15,000 pounds less. This work was done in the Baldwin shops. The seven wagon top boilers were placed on the Consolidations, #944 to 950, then under construction by Baldwin. Most of these classes were rebuilt with Wootten boilers prior to 1900, and in the case of the Americans #960-966, the boiler barrels were saved, but the weight put on the drivers after the second change from the original locomotive, exceeded not only the original specified weight, but also the weight on drivers of the locomotives as first built.

In the 1880's and 1890's the Reading's 4-4-0 type locomotives were maintaining some remarkably fast schedules, especially between Philadelphia and New York and between Philadelphia and Atlantic City. Not only had #366 and #206 turned in unusual bursts of speed, but #1012 built by Baldwin in May, 1889, hauled seven "heavily loaded" coaches from Camden to Atlantic City, 55.5 miles in 59 minutes and 40

seconds. Locomotives like #1012 were the first of the heavy power used on the Atlantic City Railroad.

Although the Americans had made these very fast runs, the Reading was investigating the possibilities of three other different types for high speed passenger service. They were the Columbia 2-4-2, Bicycle 4-2-2, and Atlantic 4-4-2 types. Thirteen of the Columbia type were received from Baldwin in 1892 and 1893; all with Wootten boilers, center cabs, Vauclain Compound Cylinders, and driving wheels 78 inches in diameter, for fast New York Branch service. The compound cylinders were but partly satisfactory and there arose throughout railroad circles a strong objection to the two wheeled engine truck, which was not considered safe for high speed. The Reading, after receiving the first order, cancelled most of the second order, as some of the advantages of the Columbia over the American type did not materialize. Nevertheless, on certain occasions, with the Vauclain Compound Cylinders properly maintained, unusual runs were made, and the type gained the nick-name of the "Flying Dutchman." In January, 1893, #618; Baldwin, January, 1892; made a run from Wayne Junction to Elizabeth, New Jersey, 75 miles in 75 minutes. This class in the early 1900's underwent a variety of conversions, including among them, three different wheel arrangements—2-6-0, 4-6-0, and 4-4-2, and all were eventually rebuilt with single expansion cylinders. Only one, even as rebuilt, remained in service for a long time.

The second new type of locomotive tried for passenger service was the Bicycle or 4-2-2 type. Experiments with locomotives with this wheel arrangement dated back to 1880 when #507 arrived from Baldwin's—the 5000th locomotive to be constructed by those builders. This locomotive had a wide firebox on which the cab was set, and caused some interest at the time of its trials on the New York Branch. On one of the few test runs made, #507 hauled four cars from Philadelphia to Jersey City, 89 miles in 98 minutes, but she was soon returned to the builder and sold to the Eames Vacuum Brake Company who transported her to England.

Again in 1895 and 1896 after having had some experience with the Columbias running with the parallel rods removed, two 4-2-2 type locomotives, #385 and #378 were built by Baldwin. Their boilers varied slightly in size and although speedy and good steamers, their comparatively low hauling capacity, due chiefly to limited weight on drivers, proved a serious handicap. Consequently these locomotives were rebuilt into 4-4-0's in 1904 after the Atlantics had fully proven their worth.

One of the greatest achievements for the time, in the development of the high speed passenger locomotive, was attained with the introduction of the Atlantic type. Two of this type, #1026 and #1027 with Wootten fireboxes, were built by Baldwin in 1896 for the nationally famous seashore service between Camden and Atlantic City. These were designed to compete with the Pennsylvania Railroad and to cover the 55.5 miles in sixty minutes with eight cars, and fifty minutes with six cars. In July and August, 1897, #1027 turned in a remarkable day by day speed record. On July 14th, which was her fastest time, the 55.5

mile run was made in $46\frac{1}{2}$ minutes, with five cars. Newspaper accounts noted the day after, that the distance from Hammonton to Elwood, 6.2 miles, was covered in $3\frac{1}{2}$ minutes or at the rate of 106 miles per hour. Train dispatchers sheets do not verify this.

A letter written by Reading president, Theodore Voorhees, to the engineer of #1027, Charles H. Fahl, best describes the performance of the Reading's first scheduled mile a minute (or better) run:

"Your performance with Train Number 25 during the past two months deserves special commendation. This train, now withdrawn for the season; was scheduled to run from Kaighn's Point, Camden, to Atlantic City, 55.5 miles in 52 minutes, or at the rate of 64 miles per hour. Owing to the inability of the ferry boats to reach Camden on scheduled time, the train always left late, the average detention from this cause being upwards of two minutes. On the other hand, you so ran the train that this loss was invariably made up, the train arriving at Atlantic City always ahead of time, this average also being two minutes, so that the record shows that for the 52 days the train ran, from July 2nd to August 31st, the average time consumed on the run by you was 48 minutes, equivalent to a uniform rate of speed from start to stop of 69 miles per hour.

"On twenty-two days the train consisted of five cars, on thirty days, it was made up with six. On no occasion did it fail to arrive at Atlantic City on time.

"This performance, I believe, has not heretofore been equalled in the history of railway service either in this country or abroad. It is one of which the management is proud and is a credit to the track, the equipment and especially to the skill and ability with which you performed the task . . ."

On July 2, 1898 Train Number 25 with #1028, celebrated its initial run of the season by clipping the record of the year before to $45\frac{1}{4}$ minutes. The train was made up with a combination car, three day coaches, and a Pullman. Samuel M. Vaclain was a passenger on this run made at an average speed of 72.9 miles per hour.

The Reading continued to order and build locomotives of the Atlantic type for the following twenty years, of which, more will be mentioned in the 1900-1944 group history.

Another drastic change in the Philadelphia and Reading motive power was given trial near the close of this period. This was the experimental use of soft coal as fuel. The demand for small sizes of anthracite, which was now being prepared and burned more successfully, resulted in an increase in its market value, which eventually exceeded that of soft coal, and there was a general trend among the hard coal roads to sell the small anthracite and use soft coal in its stead. The Reading was no exception, and in 1898, received the first of its L-3 class for fast freight service using soft coal for engine fuel. These were followed by the I-7-a class in 1899 and the L-4-b class in 1900. Also, just at the turn of the century, plans were made to rebuild some of the wide firebox consolidations to end cab soft coal burners. These were later the I-3-a class.

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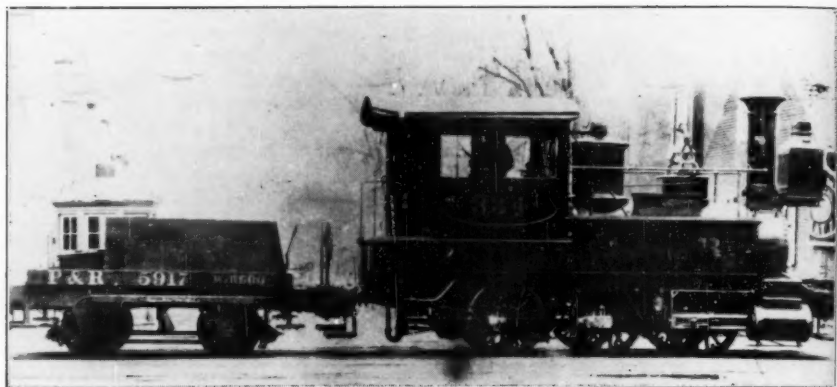
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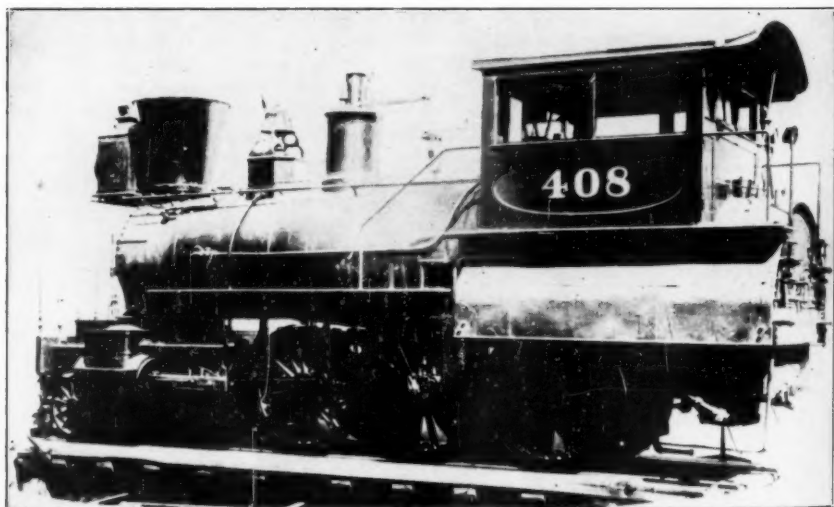
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P. & R. #334—Reading Shops, 1871.



P. & R. #408—Reading Shops, 1877. First locomotive with Wootten boiler.

Thus, this second period in the motive power history of the Reading was one of important changes and improvements. Marked by the adoption and improved design of the Wootton boiler for burning fine anthracite, it closed with a rather limited attempt to revert to the narrow firebox and the use of soft coal. The replacement of the American type by the Atlantic for certain kinds of service had definitely begun, and although the Ten-Wheeler was by no means abandoned it was transferred to fast freight duty and the heavy hauling was taken over by the Consolidations. The use of the Vaucrain Compound cylinders, which had a most promising start in the 1890's reached its zenith by the close of the century. Few were applied after 1900 and by 1905, all 128 locomotives had been converted to single expansion. The latter part of the period is also punctuated by a number of record breaking maximum speeds, not only for the Reading, but the country as well.

The practice of building locomotives at Reading continued until 1886 when a change of policy was made on account of the increasing number of locomotives in service and the lack of shop facilities. After that time the shops were devoted exclusively to rebuilding and repairing locomotives, and the new ones were purchased from Baldwin.

**Locomotives Built (new) at Reading Shops, Reading, Pa.,
from December 1, 1871 to April, 1900***

12-1871— 1	1879—12
1872—28	1880— 8
1873—25	1881—12
1874—16	1882—13
1875—10	1883—21
1876—15	1884—21
1877— 4	1885— 4
1878—10	1886— 9

Total—209 locomotives

1871-1900 Numbering

The locomotives included in the list from 1871 to 1900 are arranged in numerical order, that in 1871 was based upon, with few exceptions, the date of the locomotive first running on the Philadelphia and Reading. The numbers are shown in the first left hand column. If there should be two or more locomotives listed with the same number, the second and third numbers are locomotives that replaced the first. An additional line pertaining to a locomotive of the same number, indicates a rebuilding after that locomotive was numbered in December, 1871.

The second column generally lists the former name used in the 1836-1871 classification and the numbers are those assigned in 1900.

In the original numbering made in December, 1871, the lowest number was assigned to the oldest locomotive, and the numbers increased

* Excludes at least one built for the Central Railroad of New Jersey.

on the basis of the chronological order. But it must be remembered that the date used was based upon the date that the locomotive was first run on the Philadelphia and Reading, rather than the construction date. A sample of this—the engines of the East Pennsylvania Railroad were acquired in May, 1869, and while all were built prior to that time, the oldest in 1859 as it happened, they were numbered on the basis of being “first run” in May, 1869 which was true as far as the Philadelphia and Reading records were concerned.

As to the Philadelphia and Reading’s own engines, the date “When First Run” or the date of an engine’s most recent rebuilding, was the determining factor in the assignment of its number. For example, an engine although built in 1852 and rebuilt in 1865, would have been numbered with those built in 1865. Generally speaking, locomotives from absorbed or leased lines were given a block of numbers immediately following the highest number in use at that time.

As engines in this group were disposed of, their numbers were filled with new engines, thus defeating the purpose of chronological numbering, and in April, 1900, a general renumbering and new classification took place, in which blocks of numbers were assigned to each of the classes.

Although details are meager, the Philadelphia and Reading is known to have established a classification prior to 1867. Instead of assigning shop numbers to those locomotives built new at Reading in the order that they were built, shop numbers were applied to the standard classes designed by Millholland. For example, the locomotive *Kentucky* was the first of her type built at Reading and she was classified Kentucky Class #1. The second locomotive of that class was the *Girard* which was assigned Kentucky Class #2, and so on. This arrangement of classifying also applied to all other standard classes built at Reading Shops including the *Hiawatha* that originated in 1859. The class shop number system continued, in essence but with many minor variations so long as locomotives were built at Reading and until the new classification was established in 1900. Letters such as D for the 4-4-0’s, were assigned to various existing wheel arrangements probably during the 1880’s, and replaced to a large degree the old shop numbering system, but earmarks of the original setup remained evident.

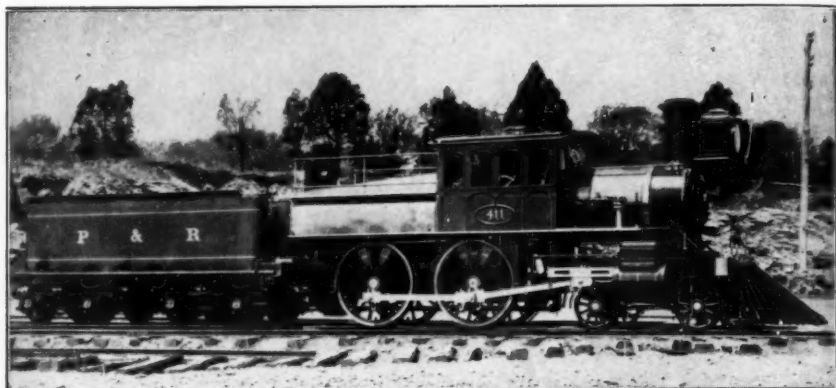
In the early 1880’s “O” was applied to many locomotives on the verge of retirement, although some carried their “O” as a prefix to their regular engine numbers for several years.

Locomotives—1871-1900

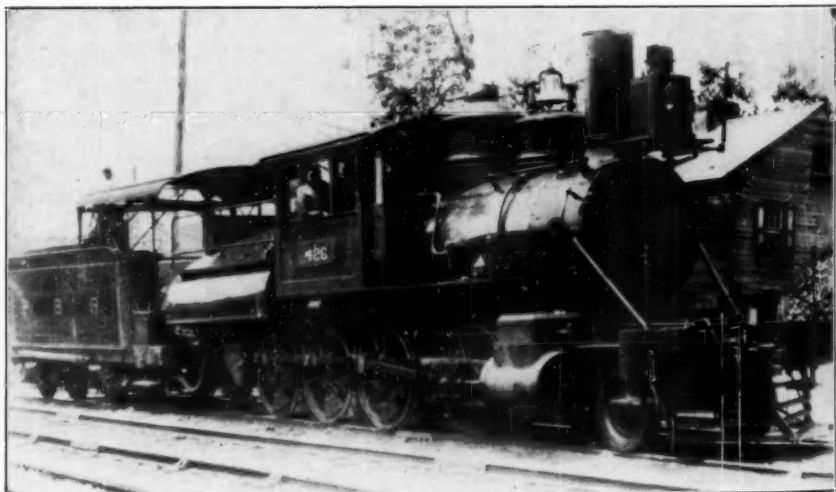
No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.
1	Rocket	P & R*	1863	0-4-0	10½x16"	41¾"	26550
		Ret. 1879 and preserved at Franklin Institute					
1	1201	P & R	3-1879	0-4-0W	9x16"	35"	31200
		Re. 195, 12-1897					
1	101	Baldwin 15791	3-1898	4-4-0	14x20"	60"	80000
2	Engineer	P & R*	1863	0-4-0T	?	?	27225
		Sc. 1879					
2		P & R	4-1879	0-4-0W	13x16"	35"	31200
	Sold—Phila & Conshohocken Stone Quarry Co.,		8-1895				
2	1231	Baldwin 14917	6-1896	0-4-0	14x22"	44"	60000
3	Planet	P & R*	1863	0-4-0	?	?	26550
	Sold—W. B. Ogden, 7-30-1872						
3		P & R	6-1872	0-4-0	9x16"	34"	25500
		Sc. 6-1893					
3	1232	Baldwin 14918	6-1896	0-4-0	14x22"	44"	60000
4	Tuscarora	P & R*	6-1855	?	?	?	31050
		Sc. 1879					
4	1269	P & R	8-1879	0-6-0W	16x18"	43"	61600
5	Schuylkill	P & R*	1848	4-4-0	?	?	33075
	Sold—Schuylkill & Susquehanna R. R.,		1872				
5	489	P & R	4-1873	4-6-0	18x24"	54"	81500
6	Shamokin	P & R*	11-1855	4-4-0	?	?	37125
		Sc. 1881					
6		P & R	4-1882	0-6-0W	16x18"	43"	61600
		Sc. 5-1899					
6	991	Baldwin 17096	10-1899	2-8-0	22x28"	56"	165000
7	Huron	P & R*	11-1863	4-4-0	?	?	34300
		Sc. 1879					
7	1270	P & R	8-1879	0-6-0W	16x18"	43"	61600
8	Osceola	P & R*	1849	4-4-0	?	?	33300
		Sc. 1879					
8		P & R	10-1879	0-6-0W	16x18"	43"	61600
		P & R*	—	0-6-0W	16x18"	43"	69000
9	Erie	P & R*	1863	4-4-0	?	?	38700
		Sc. 1876					
9		P & R	8-1876	4-6-0	18x24"	54"	81500
		P & R*	—	4-6-0	18x24"	54"	95000
10	United States	Baldwin 196	6-1844	0-6-0	15x18"	46"	41850
		Sc. 1872					
10	1260	P & R	9-1872	0-6-0	16x18"	43"	63500
11	Atlantic	P & R*	1847	?	?	?	45225
		Sc. 1872					
11		P & R	5-1872	4-6-0	18x22"	48"	77000
	Sold—Poulterer & Co.		1-1899				
11	961	Baldwin 16414	12-1898	2-8-0	22x28"	56"	163000
12	Constitution	Baldwin 231	6-1845	0-6-0	15x18"	46"	43820
		Sc. 1872					
12		P & R	7-1872	4-4-0	17x22"	61½"	73300
		Sc. 12-1897					
12	556	Baldwin 15900	5-1898	4-6-0	14&24x26"	61"	152000
13	St. Lawrence	Baldwin 230	5-1845	0-6-0	15x18"	46"	43820
13		P & R	8-1874	4-6-0	18x24"	54"	81500
	517	P & R*	10-1890	4-6-0W	18x24"	54"	103400
14	Reading	P & R*	9-1846	?	?	?	36450
	Sold—Jamesville & Washington Land & Lumber Co.,		6-1872				
14		P & R	7-1872	0-4-0	9x16"	34"	25500
		Sc. 4-1897					
14	557	Baldwin 15901	5-1898	4-6-0	14&24x26"	61"	152000

No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.
15	Sanatoga	P & R*	6-1847 1872	?	?	?	42200
15	441	P & R	9-1872	4-6-0	18x22"	48"	85000
16	Monterey	P & R*	11-1857 1875	?	?	?	44775
16	506	P & R P & R*	9-1875 3-1899	4-6-0 4-6-0	18x24" 18x24"	54" 54"	81500 94000
17	California	P & R*	11-1855 1874	?	?	?	52200
17	1263	P & R	3-1874	0-6-0	16x18"	43"	64000
18	Maine	Hinkley	7-1849 1872	4-4-0 1872	16x20"	54"	57375
18	465	P & R P & R*	6-1872 —	4-6-0 4-6-0	18x22" 18x22"	48" 48"	85000 92100
19	Hudson	P & R	10-1850 1874	0-6-0 1874	?	?	44000
19	32	P & R	8-1874	4-6-0	18x24"	54"	81500
19	Sold—Atlantic City R. R. #1022, 1453	Baldwin	2-1889 4-1892	— 2-6-0	— 18x24"	— 54"	— 94200
20	Delaware	From Hunter's Run & Slate Belt #5—Lancaster P & R*	12-1859 1881	0-8-0 1881	& Reading 5, 1894	?	65250
20	755	Baldwin	7-1881	2-8-0W	20x24"	50½"	114000
21	Allegheny	P & R*	11-1851 1874	0-8-0 1874	?	?	53775
21	Sold—Reading & Columbia R. R. 1424	P & R	7-1875	0-8-0	18x22"	43"	79800
22	Wisconsin	P & R*	1-1871	0-8-0	18x22"	43"	79800
23	Renumbered 1419 Wyomissing	4-1900 P & R*	7-1852 1876	2-6-0 1876	?	?	60525
23	140	P & R	8-1876	4-4-0	17x22"	68½"	75400
24	Pawnee	P & R	8-1852 1874	2-6-0 1874	?	?	60525
24	514	P & R P & R*	5-1874 —	4-6-0 4-6-0W	18x24" 18x24"	54" 54"	81500 103400
25	Ottawa	Baldwin	8-1857	0-8-0	18x20"	?	?
25	From Little Schuylkill R. R. "Schuylkill"?	R. R. "Schuylkill"?	Sold R & C R R 1876	—	—	—	—
25	1435	P & R P & R*	5-1879 2-1892	0-8-0W 0-8-0W	18x22" 18x22"	43" 43"	80000 94000
26	Octorara	P & R	5-1853 1874	2-6-0 1874	?	?	62775
26	496	P & R	5-1874	4-6-0	18x22"	54"	81500
27	Metamora	P & R	6-1853 1875	2-6-0 1875	?	?	62775
27	1427	P & R	8-1875	0-8-0	18x22"	43"	79800
28	Aramingo	P & R	7-1853 1874	2-6-0 1874	?	?	62775
28	85	P & R	5-1874	4-6-0	18x24"	54"	81500
28	Sold—Reading & Columbia R. R., #1096, 187	P & R	4-1883 1-1884	— 4-4-0W	18½x22"	68½"	?
29	Wissahickon	P & R	8-1853 1873	2-6-0 1873	?	?	62775
29	1430	P & R P & R*	2-1874 9-1888	0-8-0 0-8-0	18x22" 18x22"	43" 43"	79800 83200
30	Comanche	P & R	9-1853 1875	2-6-0 1875	?	?	62775
30	1425	P & R	8-1875	0-8-0	18x22"	43"	79800
31	Seneca	P & R	10-1853 12-1875	2-6-0 12-1875	?	?	62775

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P. & R. #411—Reading Shops, 1880.



P. & R. #426—Reading Shops, 1880.

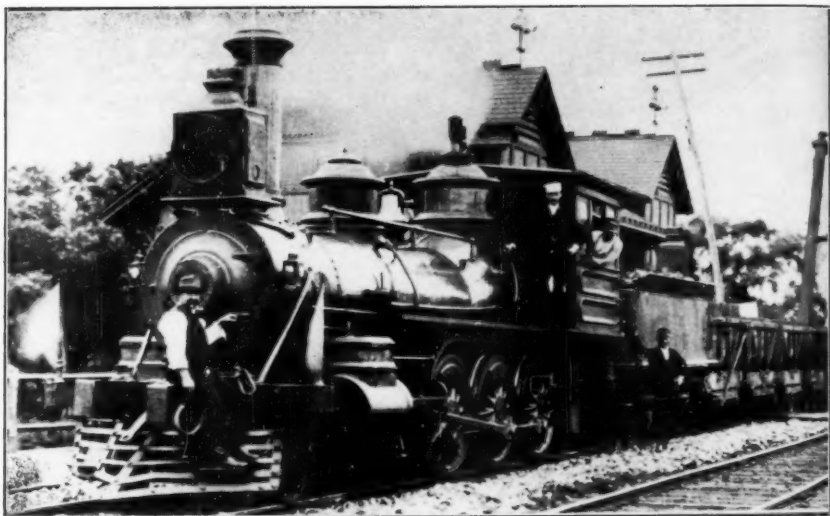
No.	Name & 1900 #	Builder		Date	Type	Cyl.	Dr.	Wt.
31	86	P & R		1-1876	4-6-0	18x24"	54"	89000
	Sold—Reading &	Columbia R. R., #1087,		11-188				
31	558	Baldwin	15902	5-1898	4-6-0	14&24x26"	61"	152000
32	Tecumseh	P & R		11-1853	2-6-0	?	?	62775
			Sc.	1873				
32	497	P & R		6-1874	4-6-0	18x24"	54"	81500
33	Tamaqua	P & R*		3-1871	0-8-0	18x22"	43"	79800
	1432	P & R*		—	0-8-0	18x22"	43"	83200
34	Sciota	P & R		11-1854	2-6-0	?	?	62775
			Sc.	1873				
34	1422	P & R		11-1873	0-8-0	18x22"	43"	79800
35	Wabash	P & R		11-1854	2-6-0	?	?	62775
			Sc.	1872				
35	439	P & R		3-1872	4-6-0	18x22"	48"	85000
36	Germantown	P & R*		4-1871	0-8-0	18x22"	43"	79800
	Renumbered 1420	4-1900						
37	Harrisburg	P & R*		2-1871	0-8-0	18x22"	43"	79800
			Sc.	12-1898				
37	962	Baldwin	16415	12-1898	2-8-0	22x28"	56"	163000
38	Juniata	P & R		6-1855	2-6-0	?	?	62775
			Sc.	1872				
38	440	P & R		8-1872	4-6-0	18x22"	48"	85000
39	Pocahontas	Baldwin*		8-1855	0-8-0	?	?	52550
			Sc.	1874				
39	1262	P & R		4-1874	0-6-0	16x18"	43"	64000
40	Florida	P & R*		9-1855	0-8-0	?	?	52200
			Sc.	1874				
40	498	P & R		9-1874	4-6-0	18x24"	54"	81500
41	Amazon	P & R*		6-1856	0-8-0	?	?	56690
			Sc.	1873				
41		P & R		11-1873	0-8-0	18x22"	43"	79800
	1431	P & R*		—	0-8-0	18x22"	43"	83200
42	Columbus	P & R*		11-1856	?	?	?	50400
			Sc.	1878				
42	1266	P & R		6-1878	0-6-0W	16x18"	43"	61600
43	Yorktown	P & R*		11-1856	0-8-0	?	?	55155
			Sc.	1880				
43		P & R		3-1886	4-6-0W	18x24"	54"	98300
	511	P & R*		—	4-6-0	18x24"	54"	95000
44	Petrel	P & R*		1863	?	?	?	63200
	Renumbered 044,	1883,	Sc.	9-1888				
44	149	Baldwin	6789	4-1883	4-4-0W 18½x22"	61½"	99500	
45	Carolina	P & R*		6-1857	?	?	?	52425
			Sc.	1877				
45	504	P & R		9-1877	4-6-0	18x24"	54"	81500
46	Missouri	P & R*		7-1857	?	?	?	52425
			Sc.	1874				
46		P & R		7-1874	4-6-0	18x24"	54"	81500
	516	P & R*		7-1890	4-6-0W	18x24"	54"	103400
47	New York	P & R*		7-1857	0-6-0	?	?	53550
			Sc.	1878				
47		P & R		8-1878	0-6-0W	16x18"	43"	61600
	1264	P & R*		11-1887	0-6-0	16x18"	43"	67900
48	Rio Grande	P & R*		7-1857	0-8-0	?	?	56475
			Sc.	1879				
48		P & R		5-1881	0-4-0W?	?	?	53000
			Sc.	7-1897				
48	559	Baldwin	15903	5-1898	4-6-0	14&24x26"	61"	152000
49	Vera Cruz	P & R		8-1857	?	?	?	59625
	Renumbered 049,	1883	Sc.	9-1888				

No.	Name & 1900 #	Builder		Date	Type	Cyl.	Dr.	Wt.
49		Baldwin	6799	6-1883	4-4-0W18½x22"	61½"		99500
	181	P & R*		3-1898	4-4-0W18½x22"	61½"		97000
50	Texas	P & R		1858	0-8-0	?		58725
			Sc.	1878				
50	1433	P & R		3-1878	0-8-0W	18x22"	43"	80000
51	Ohio	P & R*		8-1858	0-8-0	?		61875
			Sc.	1872				
51	490	P & R		5-1873	4-6-0	18x24"	54"	89000
52	Warrior	P & R		10-1858	0-8-0	?		50400
			Sc.	1881				
52	1274	P & R		8-1881	0-6-0W	16x18"	43"	61600
53	Oregon	P & R*		12-1858	0-6-0	?		47700
			Sc.	1881				
53	733	Baldwin	5564	3-1881	2-8-0W	20x24"	50½"	114000
54	Maryland	P & R*		4-1859	0-8-0	?		61875
			Sc.	1880				
54	1273	P & R		11-1880	0-6-0W	16x18"	43"	61600
55	Pacific	P & R*		5-1859	0-6-0	?		49725
			Sc.	1891				
55	734	Baldwin	5581	4-1881	2-8-0W	20x24"	50½"	114000
56	Taunton	P & R*		5-1871	4-4-0	15x20"	61"	68000
			Sc.	2-1895				
56	1233	Baldwin	14919	6-1896	0-4-0	14x22"	44"	58000
57	Minnehaha	P & R		6-1859	4-4-0	?		56690
	Renumbered 057,	1883—sold	Williamstown & Delaware River R R	6-1885				
57	182	Baldwin	6848	7-1883	4-4-0W18½x22"	61½"		99500
		P & R*		3-1899	4-4-0W18½x22"	61½"		97000
58	Hiawatha	P & R		6-1859	4-4-0	?		56690
			Sc.	1883				
58	150	Baldwin	6758	5-1883	4-4-0W18½x22"	61½"		99500
59	Phoenix	P & R		11-1859	?	?		71000
			Sc.	1883				
59	1208	P & R		6-1883	0-4-0	14x22"	44"	58000
60	Ontario	P & R*		11-1859	0-6-0	?		49725
			Sc.	12-1879				
60		P & R		12-1879	4-6-0W	18x24"	54"	98300
	515	P & R*		12-1897	4-6-0W	18x24"	54"	103400
61	Active	Baldwin	942	7-1860	0-4-0	11x16"	?	32400
	Renumbered 061,	1883	Sc.	3-1886				
61	1209	P & R		6-1883	0-4-0	14x22"	44"	58000
62	Virginia	P & R*		8-1860	0-6-0	?		50625
			Sc.	1881				
62	735	Baldwin	5552	3-1881	2-8-0W	20x24"	50½"	114000
63	Baltimore	P & R*		10-1860	0-8-0	?		60525
			Sc.	1876				
63	500	P & R		2-1876	4-6-0	18x24"	54"	89000
64	Fawn	P & R		12-1860	4-4-0	?		40500
	Renumbered 064,	1882	Sc.	11-1888				
64	1278	P & R		5-1882	0-6-0W	16x18"	43"	61600
65	Hercules	P & R*		5-1861	0-8-0	?		63225
			Sc.	1879				
65	1434	P & R		5-1879	0-8-0W	18x22"	43"	80000
66	Chesapeake	P & R*		6-1861	?	?		59400
			Sc.	1881				
66		Baldwin	5539	3-1881	2-8-0W	20x24"	50½"	114000
	730	P & R*		2-1899	2-8-0W	20x24"	50½"	114000
67	Mohawk	P & R*		9-1861	?	?		53525
			Sc.	1883				
67	1205	P & R		4-1883	0-4-0	14x22"	44"	58000

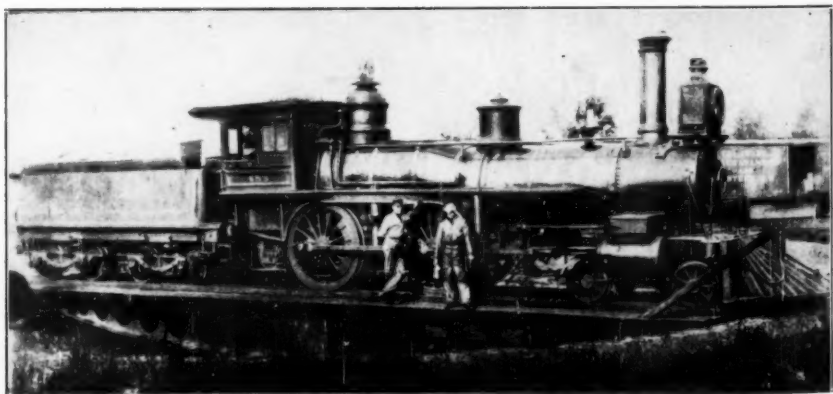
No.	Name & 1900 #	Builder		Date	Type	Cyl.	Dr.	Wt.
68	Niagara	P & R*		10-1861	0-6-0	?	?	51425
			Sc.	1881				
68	1276	P & R		11-1881	0-6-0W	16x18"	43"	61600
69	Genesee	P & R*		11-1861	?	?	?	53325
	Renumbered 069,	1883	Sc.	11-1888				
69	151	Baldwin	6805	6-1883	4-4-0W18½x22"	61½"	?	99500
70	Atlas	P & R*		11-1861	0-8-0	?	?	62550
			Sc.	1878				
70	1267	P & R		10-1878	0-6-0W	16x18"	43"	61600
71	Union	P & R		3-1862	?	?	?	78075
			Sc.	1883				
71	1206	P & R		4-1883	0-4-0	14x22"	44"	58000
72	Elmira	P & R*		7-1862	4-4-0	?	?	60525
			Sc.	1880				
72		P & R		2-1880	4-6-0W	18x24"	54"	98300
	520	P & R*		—	4-6-0W	18x24"	54"	103400
73	Auburn	P & R*		8-1862	4-4-0	?	?	60525
			Sc.	1880				
73		Baldwin	5536	3-1881	2-8-0W	20x24"	50½"	114000
	731	P & R*		2-1899	2-8-0W	20x24"	50½"	114000
74	Dove	P & R		10-1862	4-4-0	?	?	43425
	Renumbered 074,	1884	Sc.	9-1884				
74	1210	P & R		8-1884	0-4-0	14x22"	44"	58000
75	Mars	P & R		11-1862	4-4-0	?	?	51425
	Sold—Atlantic City	R. R.		2-1889	Renumbered 1005			
75	992	Baldwin	17097	10-1889	2-8-0	22x28"	56"	165000
76	Dakota	P & R		1-1863	4-4-0W	?	?	56690
	Renumbered 076,	1883	Sc.	2-1886				
76	152	Baldwin	6766	5-1883	4-4-0	18½x22"	61½"	99500
77	Nevada	P & R		3-1863	4-6-0	18x22"	46"	68400
	450	P & R*		—	4-6-0	18x22"	48"	93800
78	Wyoming	P & R		3-1863	4-6-0	18x22"	46"	68600
	462	P & R*		—	4-6-0	18x22"	48"	93800
79	Anthracite	L. S. R. R.		—	?	?	?	50850
	From LSRR		Sc.	1881				
79	1275	P & R		9-1881	0-6-0W	16x18"	44"	58000
80	Beaufort	Norris-Phila		—	?	?	?	43650
	From LSRR		Sc.	1878				
80		P & R		4-1878	0-8-0W	18x22"	43"	80000
	1446	P & R*		—	0-8-0W	18x22"	43"	94000
81	Caroline	L. S. R. R.		—	?	?	?	53325
	From LSRR		Sc.	1881				
81		Baldwin	5544	3-1881	2-8-0W	20x24"	50½"	114000
	732	P & R*		1-1899	2-8-0W	20x24"	50½"	114000
82	Mountaineer	P & R		4-1863	0-8-0T	?	?	73350
			Sc.	1882				
82		Baldwin	6356	9-1882	2-8-0W	20x24"	50½"	114000
788		P & R*		—	2-8-0W	20x24"	50½"	114000
83	Ringgold	Norris-Phila		—	?	?	?	64350
83		P & R		11-1872	0-6-0	16x18"	43"	64000
	Sold—Pa. Nut &	Bolt Co.		12-1898				
83	993	Baldwin	17098	10-1899	2-8-0	22x28"	56"	165000
84	Sumpter	Norris-Phila		—	?	?	?	42200
	From LSRR		Sc.	1872				
84		P & R		4-1872	4-6-0	18x22"	48"	84000
	Sold—Pa. Nut &	Bolt Co.		6-1899				
84	994	Baldwin	17099	10-1899	2-8-0	22x28"	56"	165000
85	Idaho	P & R		5-1863	0-8-0	18x22"	36"	72100
	Renumbered 085,	1884,	Sc.	2-1889				
85	1214	P & R		10-1884	0-4-0	14x22"	44"	58000

No.	Name & 1900 #	Builder		Date	Type	Cyl.	Dr.	Wt.
86	Eldorado	P & R		6-1863	4-6-0	18x22"	46"	68600
	Renumbered 086,	1885,	Sc.	4-1886				
86	1215	P & R		10-1884	0-4-0	14x22"	44"	58000
87	Sonora	P & R		6-1863	4-6-0	18x22"	46"	68600
	451	P & R*		—	4-6-0	18x22"	46"	91300
88	Arizona	P & R		7-1863	4-6-0	18x22"	46"	68600
	467	P & R*		9-1877	4-6-0W	18x22"	48"	89200
89	Antietam	P & R		8-1863	4-6-0	18x22"	46"	68600
	479	P & R*		—	4-6-0W	18x22"	48"	98000
90	Mariposa	P & R		8-1863	4-6-0	18x22"	46"	68600
	Renumbered 090,	1884	Sc.	9-1884				
90	1211	P & R		8-1884	0-4-0	14x22"	44"	58000
91	Celeste	P & R*		5-1871	0-8-0	18x22"	43"	79800
			Sc.	5-1900				
92	Monitor	P & R		9-1863	4-6-0	18x22"	46"	68600
	477	P & R*		—	4-6-0W	18x22"	48"	98000
93	Pennsylvania	P & R*		1870	0-10-0T	20x26"	43"	80775
			Sc.	11-1885				
93	1449	P & R		11-1885	0-10-0W	20x26"	42 3/4"	107000
94	Tip Top	Baldwin	871	8-1859	0-4-0	11x16"	36"	35775
	Pur. from G. D.	Coleman	Sc.	7-1884				
94	161	P & R		7-1884	4-4-0W	18 1/2 x 22"	61 1/2"	98700
95	Chicago	P & R		11-1863	4-6-0	18x22"	46"	68600
			Sc.	8-1884				
95	162	P & R		7-1884	4-4-0W	18 1/2 x 22"	61 1/2"	98700
96	Gettysburg	P & R		11-1863	4-6-0	18x22"	46"	68600
	Renumbered 096,	1885	Sc.	5-1886				
96	208	P & R		10-1884	4-4-0W	21x22"	68 1/2"	105000
97	Lebanon	P & R		11-1863	4-6-0	18x22"	46"	68600
	Renumbered 1051,		Sc.	6-1885				
97	209	P & R		6-1885	4-4-0W	21x22"	68 1/2"	105000
98	Luzerne	P & R		12-1863	4-6-0	18x22"	46"	68600
	Renumbered 1052		Sc.	6-1885				
98	210	P & R		6-1885	4-4-0W	21x22"	68 1/2"	105000
99	Chattanooga	P & R		1-1864	4-6-0	18x22"	46"	68600
			Sc.	7-1885				
99	211	P & R		7-1885	4-4-0W	21x22"	68 1/2"	105000
100	Vicksburg	P & R		1-1864		18x22"	46"	68600
	Renumbered 0100			8-1884				
100	157	P & R		5-1884	4-4-0W	18 1/2 x 22"	61 1/2"	97800
101	Washington	P & R		4-1864	4-4-0	?	?	56690
	Renumbered 0101			1883				
101	1	Baldwin	6773	5-1883	4-4-0W	18 1/2 x 22"	61 1/2"	99500
	183	P & R*		1-1899	4-4-0W	18 1/2 x 22"	61 1/2"	97000
102	Kentucky	P & R		5-1864	0-10-0	20x26"	42 3/4"	88700
	Sold—Phila & Reading Coal & Iron Co.,			11-1898				
102	963	Baldwin	16416	12-1898	2-8-0	22x28"	56"	163000
103	MH #1	Baldwin	311	7-1847	0-6-0	13 1/2 x 18"	42"	34875
			Sc.	1883				
103	1282	P & R		4-1883	0-6-0W	16x18"	43"	61600
104	MH #3	M. H. R. R.*		1857	0-6-0	13 1/2 x 20"	?	37125
			Sc.	1878				
104	1268	P & R		11-1878	0-6-0W	16x18"	43"	61600
105	MH #4	M. H. R. R.*		1868	0-6-0	?	?	36000
			Sc.	1879				
105		P & R		6-1879	0-8-0W	18x22"	43"	80000
	1439	P & R*		—	0-8-0W	18x22"	43"	94000
106	MH #5	M. H. R. R.*		1869	0-6-0	?	?	36900
			Sc.	1883				
106	1291	P & R		9-1883	0-6-0W	16x18"	43"	61600

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P. & R. #441—Baldwin, 1874. At Logan, Pa., 1884, with ballast train.



P. & R. #455—Baldwin, 1867. At Newtown, Pa., about 1896.

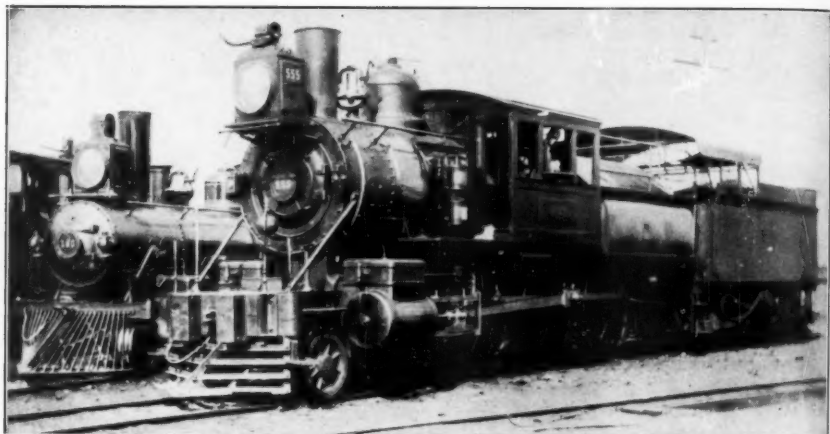
No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.
107	MH #6	P & R*	1867	4-4-0	?	?	38250
			Sc. 7-1890				
107	995	Baldwin	17100 10-1899	2-8-0	22x28"	56"	165000
108	MH #7	M. H. R. R.*	1869	0-8-0	?	?	42750
			Sc. 1873				
108	1423	P. & R.	11-1873	0-8-0	18x22"	43"	78900
109	MH #8	Baldwin	329 4-1848	0-6-0	14½x18"	42"	36000
			Sc. 1872				
109	1261	P & R	10-1872	0-6-0	16x18"	43"	64000
110	MH #13	P & R*	1867	0-8-0	?	?	56250
			Sc. 1881				
110	742	Baldwin	5609 4-1881	2-8-0W	20x24"	50½"	114000
		P & R*	8-1899	2-8-0W			
111	MH #14	P & R*	1868	0-8-0	?	?	65250
			Sc. 1883				
111	1284	P & R	5-1883	0-6-0W	16x18"	43"	65700
112	MH #15	P & R*	1867	0-8-0	?	?	65250
			Sc. 1881				
112	737	Baldwin	5615 5-1881	2-8-0W	20x24"	50½"	114000
113	MH #16	P & R*	1867	0-8-0	?	?	56250
			Sc. 1879				
113	175	P & R	10-1879	4-4-0W	18½x22"	61½"	86000
		P & R*	3-1898	4-4-0W	18½x22"	61½"	101500
114	MH #17	P & R*	1868	0-8-0	?	?	65250
			Sc. 1881				
114	738	Baldwin	5625 5-1881	2-8-0W	20x24"	50½"	114000
115	MH #18	P & R*	1868	0-8-0	?	?	65250
			Sc. 1881				
115	739	Baldwin	5628 5-1881	2-8-0W	20x24"	50½"	114000
116	MH #19	P & R*	1867	0-8-0	?	?	56250
			Sc. 1882				
116	1280	P & R	8-1882	0-6-0W	16x18"	43"	61600
117	MH #20	P & R*	1868	0-8-0	?	?	65250
			Sc. 1882				
117	1279	P & R	7-1882	0-6-0W	16x18"	43"	61600
118	MH #21	P & R*	1867	0-8-0	?	?	56250
			Sc. 1879				
118	146	P & R	11-1879	4-4-0W	18½x22"	61½"	86000
119	MH #22	P & R*	1867	0-8-0	?	?	56250
			Sc. 1879				
119	512	P & R	12-1879	4-6-0W	18x24"	54"	98300
		P & R*	—	4-6-0	18x24"	54"	95000
120	MH #23	P & R*	1868	0-8-0	?	?	56250
			Sc. 1880				
120	1272	P & R	6-1880	0-6-0W	16x18"	43"	61600
121	MH #24	P & R*	1868	0-8-0	?	?	65250
			Sc. 1883				
121	1285	P & R	5-1885	0-6-0W	16x18"	43"	65700
122	MH #25	M. H. R. R.*	1864	0-8-0	?	?	67500
			Sc. 1878				
122	Sold—Pa. Nut &	P & R	12-1878	4-4-0W	17x22"	61"	?
		Bolt Co.	6-1899				
122	996	Baldwin	17101 10-1899	2-8-0	22x28"	56"	165000
123	MH #26	P & R*	1866	0-8-0	?	?	67500
			Sc. 1875				
123	499	P & R	9-1875	4-6-0	18x24"	54"	89000

No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.
124	MH #27	P & R*	1868 Sc. 1874	0-8-0	?	?	67500
124		P & R	11-1874 Sc. 2-1898	4-6-0	18x24"	54"	89000
124	964	Baldwin	16417 12-1898	2-8-0	22x28"	56"	163000
125	MH #28	P & R*	1867 Sc. 1881	0-8-0	?	?	67500
125	740	Baldwin	5632 5-1881	2-8-0W	20x24"	50½"	114000
126	MH #29	P & R*	1868 Sc. 1881	0-8-0	?	?	67500
126	741	Baldwin	5639 5-1881	2-8-0W	20x24"	50½"	114000
127	MH #30	P & R*	1868 Sc. 1881	0-8-0	?	?	67500
127	743	Baldwin	5647 5-1881	2-8-0W	20x24"	50½"	114000
128	MH #31	Baldwin	1176 10-1863	0-8-0	20x22"	43"	67950
	Sold—Huntingdon	& Broad	Top Mt. R. R.—3-1872				
128		P & R	10-1872	0-8-0	18x22"	43"	79800
	Sold—Pa. Nut &	Bolt Co.	6-1899				
128	997	Baldwin	17144 10-1899	2-8-0	22x28"	56"	165000
129	MH #32	Baldwin	1178 10-1863	0-8-0	20x22"	43"	67950
	Sold—Huntingdon	& Broad	Top Mt. R. R.—4-1872				
129		P & R	11-1872	0-8-0	18x22"	43"	79800
	1436	P & R*	—	0-8-0W	18x22"	43"	94000
130	Elk	Baldwin	1174 10-1863	0-8-0	20x22"	43"	78750
	Formerly Catawissa	R. R. #10	— Sc. 1875				
130	1426	P & R	8-1875	0-8-0	18x22"	43"	79800
131	Pittsburg	P & R	8-1864	4-6-0	18x22"	46"	68600
	446	P & R*	7-1899	4-6-0	18x22"	48"	91500
132	Cincinnati	P & R	9-1864	4-6-0	18x22"	48"	84000
	Renumbered 402	4-1900					
133	Hagerstown	P & R*	5-1871 Sc. 9-1898	0-8-0	18x22"	43"	79800
133	965	Baldwin	16418 12-1898	2-8-0	22x28"	56"	163000
134	Wasp	E. S. Norris	1861 9-1872	?	?	?	52425
		P & R*	Sold—W & D R R				1-1886
134	201	P & R	4-4-0W18½x22"			68½"	104500
135	Cleveland	P & R	7-1886	4-6-0	18x22"	46"	68600
	448	P & R*	—	4-6-0	18x22"	48"	91300
136	Detroit	P & R	11-1864	4-6-0	18x22"	46"	68600
	Sold—Pa. Nut &	Bolt Co.	11-1898				
136	966	Baldwin	16419 12-1898	2-8-0	22x28"	56"	163000
137	Milwaukee	P & R	11-1864	4-6-0	18x22"	46"	68600
		Sc. 12-1895					
137	998	Baldwin	17145 10-1899	2-8-0	22x28"	56"	165000
138	Springfield	P & R	11-1864	4-6-0	18x22"	48"	84000
	Renumbered 403	4-1900					
139	Toledo	P & R	11-1864	4-6-0	18x22"	46"	68600
	Renumbered 0139		Sc. 5-1886				
139	159	P & R	6-1884	4-4-0W18½x22"		61½"	97800
140	Ant	Baldwin	1282 9-1864	0-4-0	11x16"	36"	39600
	Ex B & S. S. R. R.	"Monitor"—Re	0140-1884, Sc. 3-1886				
140		P & R	3-1884	4-4-0W18½x22"		61½"	97800
	189	P & R*	5-1899	4-4-0W18½x22"		61½"	97000
141	Louisville	P & R	1-1865	4-6-0	18x22"	48"	84000
	Renumbered 404,	4-1900					
142	Lafayette	P & R	1-1865	4-4-0	?	?	56690
	Renumbered 0142-	1883	Sc. 6-1886				
142	153	Baldwin	6786 6-1883	4-4-0W18½x22"		61½"	99500
143	Kosciusko	P & R	2-1865	4-4-0	?	?	56690
	Renumbered 0143-	1883	Sc. 10-1886				

No.	Name & 1900 #	Builder		Date	Type	Cyl.	Dr.	Wt.
143	185	Baldwin	6814	6-1883	4-4-0W	18½x22"	61½"	99500
		P & R*		9-1898	4-4-0W	18½x22"	61½"	97000
144	New Orleans	P & R		2-1865	4-6-0	18x22"	46"	68600
			Sc.	2-1884				
144	160	P & R		6-1884	4-4-0W	18½x22"	61½"	97800
145	DuPont	Norris-Phila		1865	4-6-0	17x22"	55"	65475
	Renumbered 484,	4-1900.						
146	Farragut	Norris-Phila		1865	4-6-0	17x22"	55"	65475
			Sc.	8-1896				
146	999	Baldwin	17146	10-1899	2-8-0	22x28"	56"	165000
147	Foote (Re. 485)	Norris-Phila		1865	4-6-0	17x22"	55"	65475
148	Grant (Re 486)	Norris-Lanc.		1865	4-6-0	17x22"	55"	67275
149	Porter (Re 487)	Norris-Phila		1865	4-6-0	17x22"	55"	65475
150	Beaver	P & R		4-1865	?	?	?	45450
	Renumbered 1055							
150	1212	P & R		9-1884	0-4-0	14x22"	44"	58000
151	Ferret	P & R		4-1865	?	?	?	45450
	Renumbered 0151-	1884—Sold Phila & Reading Coal & Iron Co.		9-1886				
151	1213	P & R		9-1884	0-4-0	14x22"	44"	58000
152	Sheridan	Norris-Lanc.		1865	4-6-0	17x22"	55"	67275
	Renumbered 488,	4-1900.						
153	Dubuque	P & R		5-1865	4-6-0	18x22"	46"	68600
	471	P & R*		—	4-6-0W	18x22"	48"	98000
154	Galena	P & R		5-1865	4-6-0	18x22"	46"	68600
			Sc.	7-1894				
154	1000	Baldwin	17147	10-1899	2-8-0	22x28"	56"	165000
155	Cairo	P & R		6-1865	4-6-0	18x22"	46"	68600
	453	P & R*		—	4-6-0	18x22"	48"	91300
156	Kenosha	Norris-Lanc.		1865	4-6-0	18x22"	46"	68600
	472	P & R*		1890	4-6-0W	18x22"	48"	98000
157	Lancaster	P & R		8-1864	4-6-0	18x22"	46"	84000
	Renumbered 405,	4-1900.						
158	LaCrosse	Norris-Lanc.		1865	4-6-0	18x22"	46"	84000
	Renumbered 406,	4-1900.						
159	Montana	P & R		7-1865	4-6-0	18x22"	46"	68600
	463	P & R*		—	4-6-0	18x22"	46"	91300
160	Keokuk	Norris-Lanc.		1865	4-6-0	18x22"	46"	68600
	464	P & R		2-1890	4-6-0	18x22"	48"	91300
161	Memphis	Norris-Lanc.		1865	4-6-0	18x22"	48"	84000
	Renumbered 407,	4-1900.						
162	Muscatine	Norris-Lanc.		1865	4-6-0	18x22"	46"	68600
	461	P & R*		—	4-6-0	18x22"	48"	91300
163	Nashville	Norris-Lanc.		1865	4-6-0	18x22"	46"	68600
	460	P & R*		—	4-6-0	18x22"	48"	92100
164	Osage (Re 408)	P & R		8-1865	4-6-0	18x22"	48"	84000
165	Racine (Re 409)	P & R		8-1865	4-6-0	18x22"	48"	84000
166	St. Louis	P & R		8-1865	4-6-0	18x22"	46"	68600
	480	P & R*		8-1892	4-6-0W	18x22"	48"	103000
167	Atlanta	Norris-Lanc.		1865	4-6-0	18x22"	48"	84000
	Renumbered 410,	4-1900.						
168	Natchez	Norris-Lanc.		1865	4-6-0	18x22"	46"	68600
	470	P & R*	1876 & —	—	4-6-0W	18x22"	48"	98000
169	Augusta	P & R		10-1865	4-6-0	18x22"	46"	68600
	456	P & R*		—	4-6-0	18x22"	48"	91300
170	Iroquois	P & R		10-1865	4-6-0	18x22"	48"	84000
	Renumbered 411,	4-1900.						
171	Kearsarge	P & R		10-1865	4-6-0	18x22"	48"	84000
	Renumbered 412,	4-1900.						
172	Lincoln	P & R		11-1865	4-4-0	?	?	56690
			Sc.	1881				

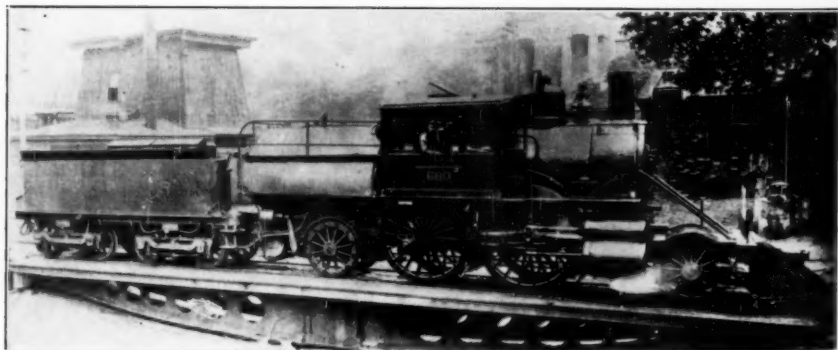
No.	Name & 1900 #	Builder		Date	Type	Cyl.	Dr.	Wt.
172	1277	P & R		11-1881	0-6-0W	16x18"	43"	65700
173	Mobile	Norris-Lanc		1865	4-6-0	18x22"	46"	68600
			Sc.	5-1898				
173	967	Baldwin	16420	12-1898	2-8-0	22x28"	56"	163000
174	Portland	P & R		11-1865	4-6-0	18x22"	46"	68600
	447	P & R*		5-1899	4-6-0	18x22"	48"	91500
175	Jackson	P & R		1-1866	4-4-0	?	?	56690
	Renumbered 0175	1883	Sc.	9-1888				
175	154	Baldwin	6784	5-1883	4-4-0W	18½x22"	61½"	?
176	Norfolk	Norris-Lanc		1866	4-6-0	18x22"	46"	68600
	473	P & R*		—	4-6-0W	18x22"	48"	98000
177	Girard	P & R		3-1866	0-10-0	20x26"	43"	88700
	Renumbered 1448	4-1900.						
178	Milton	Norris-Lanc.		1866	4-6-0	18x22"	48"	84000
	Renumbered 413	4-1900.						
179	Marion	P & R*		4-1866	4-4-0	?	?	56250
	Ex L. S. R. R.		Sc.	1877				
179	6	P & R.		7-1877	4-4-0	17x22"	68"	75400
	Sold Atlantic City	R. R.		2-1889	Re 1007			
179	1001	Baldwin	17148	10-1899	2-8-0	22x28"	56"	165000
180	Galveston	E. S. Norris		1866	4-6-0	18x22"	48"	84000
	Renumbered 414	4-1900.						
181	Newbern	E. S. Norris		1866	4-6-0	18x22"	48"	84000
	Renumbered 415	4-1900.						
182	Pensacola	E. S. Norris		1866	4-6-0	18x22"	46"	68600
			Sc.	8-1894				
182	1002	Baldwin	17149	10-1899	2-8-0	22x28"	56"	165000
183	Preston	P & R		5-1866	0-10-0	20x26"	43"	88700
			Sc.	6-1886				
183		P & R		10-1886	0-10-0W	20x26"	42¾"	107000
			Sc.	1892				
183	960	Baldwin	12725	6-1892	2-8-0W	14-24x28"	50½"	149000
184	Brooklyn	Norris-Lanc.		1866	4-6-0	18x22"	48"	84000
	Renumbered 416	4-1900.						
185	Concord	Norris-Lanc.		1866	4-6-0	18x22"	46"	68600
	483	P & R*		12-1892	4-6-0W	18x22"	48"	103000
186	Peoria	Norris-Lanc.		1866	4-6-0	18x22"	48"	84000
	Sold—Atlantic City	R. R.		3-1889	Re 1023			
186	1003	Baldwin	17150	10-1899	2-8-0	22x28"	56"	165000
187	Wharf Rat	P & R		7-1866	0-4-0	9x16"	34"	25500
			Sc.	4-1897				
187	560	Baldwin	15904	5-1898	4-6-0	14-24x26"	61"	152000
188	Mink	P & R		8-1866	0-4-0	9x16"	34"	25500
	Sold—Poulterer & Co.			11-1898				
188	968	Baldwin	16421	12-1898	2-8-0	22x28"	56"	163000
189	Minnesota	P & R*		10-1866	0-8-0	?	?	67500
			Sc.	11-1886				
189	1004	Baldwin	17151	10-1899	2-8-0	22x28"	56"	165000
190	Winona	P & R		11-1866	4-4-0	?	?	56690
	Renumbered O190	1883	Sc.	—				
190	186	Baldwin	6822	6-1883	4-4-0W	18½x22"	61½"	99500
		P & R*		1-1899	4-4-0W	18½x22"	61½"	97000
191	Illinois	P & R		5-1867	4-4-0	17x22"	61½"	73300
	Renumbered 121	4-1900.						
192	Michigan	P & R		8-1867	4-4-0	17x22"	61½"	73300
			Sc.	5-1898				
192	969	Baldwin	16422	12-1898	2-8-0	22x28"	56"	163000
193	Otter	P & R		9-1867	0-4-0	9x16"	34"	25500
	Sold—I. McHose & Son, Norristown,			12-1891				

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—Courtesy of W. A. Lucas.

P. & R. #555—Baldwin, 1890.



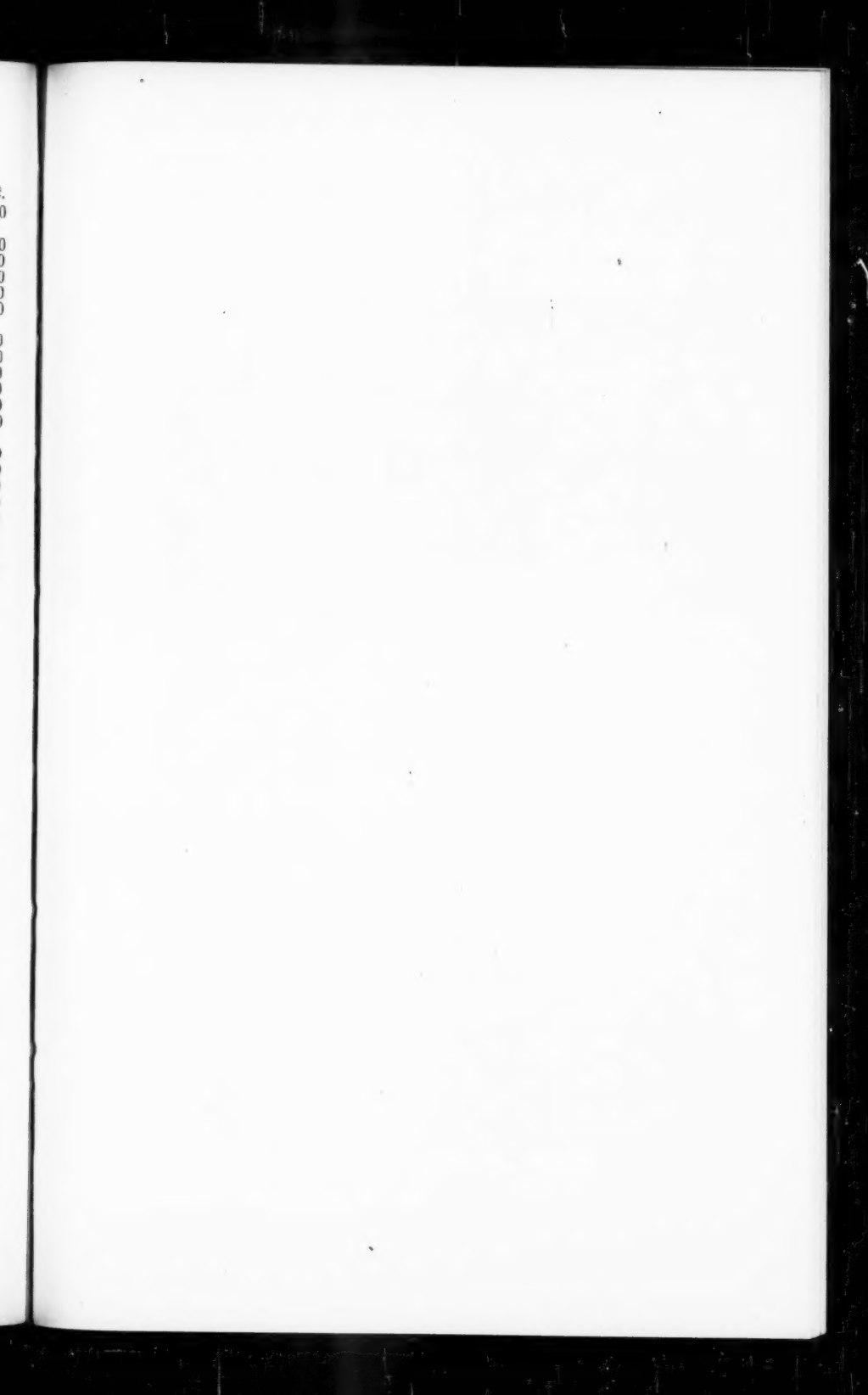
P. & R. #680—Baldwin, 1893.

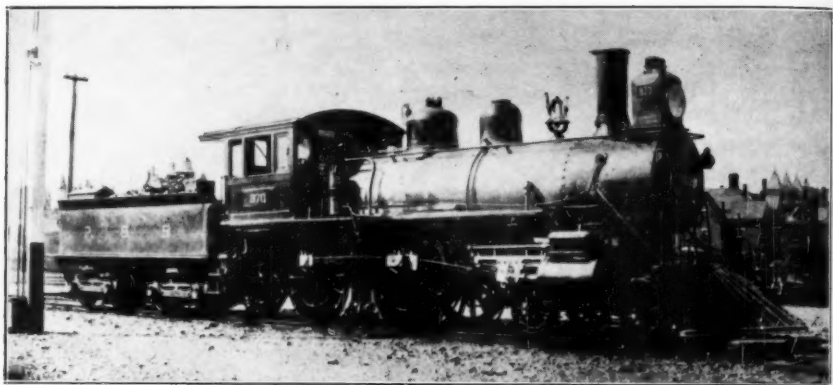
No.	Name & 1900 #	Builder		Date	Type	Cyl.	Dr.	Wt.
193	1005	Baldwin	17152	10-1899	2-8-0	22x28"	56"	165000
194	Omaha	P & R		10-1867	4-4-0	?	?	56690
	Renumbered 0194-1883		Sc.	3-1886				
194	155	Baldwin	6843	7-1883	4-4-0W	18½x22"	61½"	97800
195	Seal	P & R		10-1867	0-4-0	9x16"	34"	25500
	Sold—E. Conshohocken Stone Quarry Co.			11-1897				
195	Re from 1 12-1897 P & R			3-1879	0-4-0W	13x16"	35"	31200
	Renumbered 1201, 4-1900							
196	Alaska	P & R		4-1868	4-4-0	?	?	56690
			Sc.	1883				
196		Baldwin	6781	5-1883	4-4-0W	18½x22"	61½"	99500
	184	P & R*		7-1899	4-4-0W	18½x22"	61½"	97000
197	Saxon	P & R		5-1868	0-10-0	26x26"	42¾"	88700
			Sc.	11-1890				
197	1006	Baldwin	17153	10-1899	2-8-0	22x28"	56"	165000
198	Norman	P & R		7-1868	0-10-0	20x26"	42¾"	84600
			Sc.	12-1889				
198	1007	Baldwin	17154	10-1899	2-8-0	22x28"	56"	165000
199	Black Diamond	P & R		9-1868	0-6-0	?	?	67500
			Sc.	3-1886				
199	1293	P & R		10-1886	0-6-0	16x22"	44"	74300
200	Meade	P & R*		9-1868	4-6-0	17x22"	55"	72450
	Sold—Pa. Nut & Bolt Co.			11-1898				
200	1008	Baldwin	17155	10-1899	2-8-0	22x28"	56"	165000
201	Potomac	P & R		11-1868	0-8-0	18x22"	43"	79800
	Renumbered 1403, 4-1900.							
202	Princeton	P & R*		11-1868	0-8-0	16x22"	43"	63000
	Sold—Pa. Nut & Bolt Co.			6-1899				
202	1009	Baldwin	17156	10-1899	2-8-0	22x28"	66"	165000
203	Perkiomen	P & R		11-1868	4-4-0	17x22"	61½"	73300
	Renumbered 122, 4-1900.							
204	Yellow Spring			11-1868	0-8-0	18x22"	43"	79800
	Renumbered 1402, 4-1900.							
205	Panama	P & R*		1-1869	0-8-0	18x22"	43"	79800
	Sold—Pa. Nut & Bolt Co.			6-1899				
205	1010	Baldwin	17334	1-1900	2-8-0	22x28"	56"	165000
206	Georgia	P & R		2-1869	?	Sc. 12-1885		
206	202	P & R		7-1886	4-4-0W	18½x22"	68½"	104500
207	Spartan	P & R		2-1869	4-6-0	18x22"	48"	85000
	Renumbered 417, 4-1900.							
208	Blandon	Baldwin		a5-1869	4-6-0	17½x22"	50"	68625
	From East Penna	R. R.	Sc.	1880				
208		P & R		11-1880	0-4-0W	13x16"	35"	31200
			Sc.	7-1893				
208	1011	Baldwin	17335	1-1900	2-8-0	22x28"	56"	165000
209	Cricket	P & R*		3-1869	4-4-0	15x22"	56"	54900
	Renumbered 110, 4-1900.							
210	Nebraska	P & R*		3-1869	0-8-0	18x22"	43"	79800
	1443	P & R*		—	0-8-0W	18x22"	43"	94000
211	Peruvian	P & R		3-1869	4-6-0	18x22"	48"	85000
	Renumbered 418, 4-1900.							
212	Canadian	P & R		4-1869	4-6-0	18x22"	48"	84000
			Sc.	11-1898				
212	970	Baldwin	16423	12-1898	2-8-0	22x28"	56"	163000
213	Wilmington	P & R*		4-1869	0-8-0	18x22"	43"	79800
	Renumbered 1401, 4-1900.							
214	Arabian	P & R		5-1869	4-6-0	18x22"	48"	84000
			Sc.	8-1897				
214	561	Baldwin	15905	5-1898	4-6-0	14-24x26"	61"	152000

No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.
215	Chippewa	P & R*	5-1869	0-8-0	18x22"	43"	79800
	1447	P & R*	—	0-8-0W	18x22"	43"	94000
216	Decatur #2	Rogers	a5-1869	4-4-0	?	?	58250
	Renumbered 0216, 1882		Sc. 4-1886				
217	Dauphin ?	P & R	a5-1869	4-6-0	18x22"	48"	84000
	Sold—Pa. Nut & Bolt Co.		11-1898				
218	Easton #3	Rogers	a5-1869	4-4-0	Sc. 1883		54000
219	Essex #4	Rogers	a5-1869	4-4-0	?	?	58250
	Renumbered 0219, 1881		Sc. 4-1886				
220	Franklin #5	Rogers	a5-1869	4-4-0	Sc. 1882		58250
221	Fleetwood ?	Baldwin	a5-1869	4-6-0	17½x22"	50"	68625
			Sc. 1883				
222	Hanover #6	Rogers	a5-1869	4-4-0	Sc. 1882		54000
223	Jefferson ?	P & R	a5-1869	4-6-0	18x22"	48"	84000
	475	P & R*	9-1891	4-6-0W	18x22"	48"	98000
224	Lehigh #14	Baldwin	1124 4-1863	0-6-0	15x18"	44"	60750
			Sc. 1881				
226	Madison #1	Norris	948 1859	4-4-0	Sc. 1881		57375
227	Shamrock ?	Baldwin	a5-1869	4-6-0	17½x22"	50"	78000
			Sc. 8-1897				
228	Trenton #10	Norris-Lanc.	Sc. 7-1894	4-6-0	18x22"	48"	84000
229	Tacony #13	P & R	102 1867	4-4-0	?	?	56690
	Renumbered 0229, 1883		Sc. 9-1888				
P & R Nos. 208, 216-224, 226-229 were received from the East Pennsylvania R. R. May, 1869 and the numbers carried on that road immediately follow the name. They were replaced by the following:							
216	147	P & R	1-1882	4-4-0W18½x22"	61½"		93600
217	971	Baldwin	2-1899	2-8-0	22x28"	56"	163000
218		Baldwin	5-1883	4-4-0W18½x22"	61½"		99500
	180	P & R*	3-1899	4-4-0W18½x22"	61½"		97000
219	165	P & R	10-1881	4-4-0W18½x22"	68½"		95000
220		P & R	2-1882	4-4-0W18½x22"	61½"		93600
	178	P & R*	11-1898	4-4-0W18½x22"	61½"		93000
221	1283	P & R	9-1883	0-6-0W	16x18"	43"	61600
222	167	P & R	4-1882	4-4-0W18½x22"	68½"		95000
224		P & R	2-1881	4-4-0W18½x22"	61½"	?	
	176	P & R*	3-1899	4-4-0W18½x22"	61½"		97000
225	Mississippi	P & R*	5-1869	0-8-0	18x22"	43"	79800
	Renumbered 1404, 4-1900.						
226	166	P & R	11-1881	4-4-0W18½x22"	68½"		95000
227	562	Baldwin	15906 5-1898	4-6-0	14-24x26"	61"	152000
228	1012	Baldwin	17336 1-1900	2-8-0	22x28"	56"	165000
229	148	Baldwin	6752 5-1883	4-4-0W18½x22"	61½"		99500
230	Australia	Baldwin	1881 5-1869	4-6-0	18x22"	48"	84000
	449	P & R*	—	4-6-0	18x22"	48"	92100
231	Belgian (419)	P & R	6-1869	4-6-0	18x22"	48"	85000
232	Bolivia (29)	Baldwin	1885 5-1869	4-6-0	18x22"	48"	84000
	Sold—Atlantic City R. R.		2-1889	Renumbered 1025.			
233	Caledonia (420)	Baldwin	1882 5-1869	4-6-0	18x22"	48"	85000
234	Persian	P & R	6-1869	4-6-0	18x22"	48"	84000
	468	P & R*	2-1894	4-6-0W	18x22"	48"	103000
235	San Francisco	P & R*	6-1869	0-8-0	18x22"	43"	79800
	1442	P & R*	—	0-8-0W	18x22"	43"	94000
236	America (421)	Baldwin	1893 5-1869	4-6-0	18x22"	48"	85000
237	Bavaria (422)	Baldwin	1891 5-1869	4-6-0	18x22"	48"	85000
238	Connecticut	P & R*	7-1869	0-8-0	18x22"	43"	79800
			Sc. 1882				
238	168	P & R	6-1882	4-4-0W18½x22"	68½"		95000
239	Cambria	Baldwin	1900 6-1869	4-6-0	18x22"	48"	84000
	454	P & R*	—	4-6-0	18x22"	48"	92100

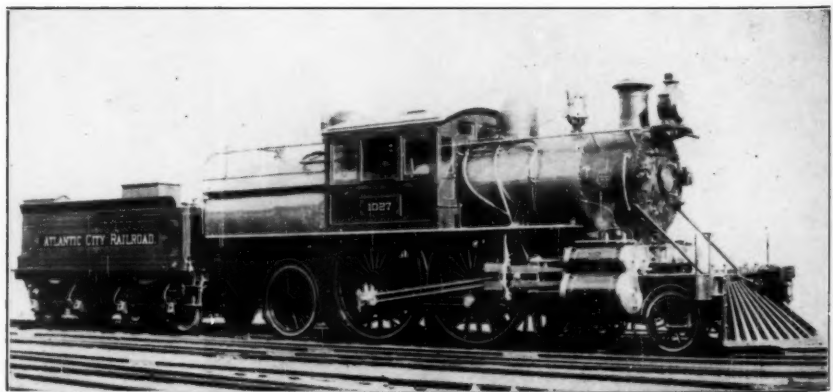
No.	Name & 1900 #	Builder		Date	Type	Cyl.	Dr.	Wt.
240	Geneva	Baldwin	1914	6-1869	4-6-0	18x22"	48"	84000
469		P & R*		—	4-6-0W	18x22"	48"	103000
241	Hungarian	P & R		7-1869	4-6-0	18x22"	48"	84000
458		P & R*		—	4-6-0	18x22"	48"	92100
242	Havana (423)	Baldwin	1910	6-1869	4-6-0	18x22"	48"	85000
243	Utah (1405)	P & R*		7-1869	0-8-0	18x22"	43"	79800
244	Vienna	Baldwin	1907	6-1869	4-6-0	18x22"	48"	84000
478		P & R*		—	4-6-0W	18x22"	48"	103000
245	Bee	P & R*		8-1869	4-4-0	15x22"	56"	54900
	Sold—Pa. Nut & Bolt Co.			6-1899				
245	1013	Baldwin	17337	1-1900	2-8-0	22x28"	56"	165000
246	Brazilian (424)	P & R		8-1869	4-6-0	18x22"	48"	85000
247	Cumberland	P & R*		8-1869	0-8-0	18x22"	43"	79800
	Renumbered 1406,	4-1900.						
248	Caspian	P & R		8-1869	4-6-0	18x22"	48"	84000
474		P & R*		—	4-6-0W	18x22"	48"	103000
249	Valentia	Baldwin	1915	6-1869	4-6-0	18x22"	48"	84000
	Sold—Pa. Nut & Bolt Co.			11-1898				
249	972	Baldwin	16501	2-1899	2-8-0	22x28"	56"	163000
250	Corsican	P & R		9-1869	4-6-0	18x22"	48"	84000
455		P & R*		7-1888	4-6-0	18x22"	48"	92100
251	Louisiana	P & R*		9-1869	0-8-0	18x22"	43"	68235
			Sc.	8-1891				
252	Susquehanna	P & R*		9-1869	0-8-0	18x22"	43"	79800
			Sc.	3-1900				
253	Charleston	P & R*		10-1869	0-8-0	18x22"	43"	79800
1428		P & R*		—	0-8-0	18x22"	43"	83200
254	Hornet	P & R*		10-1869	4-4-0	15x22"	56"	54900
			Sc.	10-1898				
254	973	Baldwin	16502	2-1899	2-8-0	22x28"	56"	163000
255	Mount Vernon	P & R*		10-1869	0-8-0	18x22"	43"	79800
			Sc.	7-1894				
256	Pottsville	P & R*		10-1869	0-8-0	18x22"	43"	79800
	Renumbered 1407,	4-1900.						
257	Monongahela	P & R*		11-1869	0-8-0	18x22"	43"	79800
	Renumbered 1408,	4-1900.						
258	Minerva	P & R		11-1869	0-6-0	16x18"	43"	64000
	Renumbered 1252,	4-1900.						
259	Shenandoah	P & R*		11-1869	0-8-0	18x22"	43"	79800
1429		P & R*		—	0-8-0	18x22"	43"	83200
260	Buffalo	P & R*		1-1870	0-8-0	18x22"	43"	79800
1444		P & R*		9-1892	0-8-0W	18x22"	43"	94000
261	Norwegian	P & R		1-1870	4-6-0	18x22"	43"	85000
	Renumbered 425,	4-1900.						
262	Savannah	P & R*		1-1870	0-8-0	18x22"	43"	79800
	Renumbered 1409,	4-1900.						
263	Austrian	P & R		3-1870	4-6-0	18x22"	43"	85000
	Renumbered 426,	4-1900.						
264	Badger	P & R		3-1870	0-4-0	9x16"	34"	25500
	Sold Poulterer & Co.			5-1894				
265	Castilian	P & R		3-1870	4-6-0	18x22"	43"	84000
466		P & R*		—	4-6-0	18x22"	43"	92100
266	Lexington	P & R*		3-1870	0-8-0	18x22"	43"	79800
	Renumbered 1410,							
267	Pine Grove	P & R*		3-1870	?	Sc. 1883		60750
267	1204	P & R		3-1883	0-4-0	14x22"	44"	58000
268	Weasel	P & R		3-1870	0-4-0	9x16"	34"	25500
	Sold—Poulterer & Co.							
269	Russian (427)	P & R		4-1870	4-6-0	18x22"	48"	85000

No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.
270	Sable	P & R	4-1870	0-4-0	9x16"	34"	25500
			Sc. 4-1897				
270	563	Baldwin	15907 5-1898	4-6-0	14-24x26"	61"	152000
271	Albany (1412)	P & R*	5-1870	0-8-0	18x22"	43"	79800
272	Arkansas (1413)	P & R*	5-1870	0-8-0	18x22"	43"	79800
273	Ashland (1411)	P & R*	5-1870	0-8-0	18x22"	43"	79800
274	Colorado	P & R*	5-1870	0-8-0	18x22"	43"	79800
	Sold—Poulterer & Co.		11-1898				
274	974	Baldwin	16503 2-1899	2-8-0	22x28"	56"	163000
275	Cuban (428)	P & R	5-1870	4-6-0	18x22"	43"	85000
276	Diana (1253)	P & R	5-1870	0-6-0	16x18"	43"	64000
277	New Hampshire	P & R	5-1870	0-8-0	18x22"	43"	79800
	1445	P & R*	—	0-8-0W	18x22"	43"	94000
278	Siberian	P & R	5-1870	4-6-0	18x22"	48"	84000
	Sold—Pa. Nut & Bolt Co.		11-1898				
278	975	Baldwin	16504 2-1899	2-8-0	22x28"	56"	163000
279	Penobscot	P & R*	6-1870	0-8-0	18x22"	43"	79800
	1437	P & R*	—	0-8-0W	18x22"	43"	94000
280	Saranac	P & R*	6-1870	0-8-0	18x22"	43"	79800
	1441	P & R*	—	0-8-0W	18x22"	43"	94000
281	Vesta (1254)	P & R	6-1870	0-6-0	16x18"	43"	64000
282	Athenian	P & R	7-1870	4-6-0	18x22"	48"	84000
	476	P & R*	5-1891	4-6-0W	18x22"	48"	103000
283	Lippincott	Baldwin	589 5-1854	0-6-0	13½x18"	42"	41890
			Sc. 1883				
284	Navigation	Baldwin	544 8-1853	0-6-0	13½x18"	42"	40990
			Sc. —				
285	J. R. Worrell	Baldwin	758 5-1857	0-6-0	13½x18"	43"	39200
			Sc. 1881				
Nos. 283-285 were received from the Schuylkill Navigation Co. and entered service on the P & R July, 1870. They were replaced by the following:							
283	1207	P & R	6-1883	0-4-0	14x22"	44"	58000
284	1281	P & R	1882-3	0-6-0W	16x18"	43"	61600
285	736	Baldwin	5589 4-1881	2-8-0W	20x24"	50½"	114000
286	Kennebec	P & R*	8-1870	0-8-0	18x22"	43"	79800
	Renumbered 1414, 4-1900.						
287	Mexican (429)	P & R	8-1876	4-6-0	18x22"	48"	85000
288	Rhode Island	P & R*	8-1870	0-8-0	18x22"	43"	79800
	1440	P & R*	—	0-8-0W	18x22"	43"	94000
289	Bohemian (430)	P & R	9-1870	4-6-0	18x22"	43"	85000
290	Narragansett	P & R*	9-1870	0-8-0	18x22"	43"	79800
	Renumbered 1415, 4-1900.						
291	Richmond	P & R*	9-1870	0-8-0	18x22"	43"	79800
	Renumbered 1416, 4-1900						
292	Roman (30)	P & R	9-1870	4-6-0	18x22"	48"	84000
	Sold—Atlantic City R. R.		2-1889	Renumbered 1024			
293	Vulcan (1255)	P & R	9-1870	0-6-0	16x18"	43"	64000
294	Gold Mine	P & R*	10-1870	0-8-0	18x22"	43"	79800
	Renumbered 1417, 4-1900.						
295	Havre de Grace	P & R*	10-1870	0-8-0	18x22"	43"	79800
	1438	P & R*	—	0-8-0W	18x22"	43"	94000
296	New Jersey	P & R*	11-1870	0-8-0	18x22"	43"	79800
	Sold—Pa. Nut & Bolt Co.		6-1899				
296	1014	Baldwin	17338 1-1900	2-8-0	22x28"	56"	165000
297	Rausch Gap	P & R*	11-1870	0-8-0	18x22"	43"	79800
	Renumbered 1418, 4-1900.						
298	Belmont	Baldwin	1137 5-1863	4-4-0	13½x24"	56"	48000
			Sc. 1880				
299	Bridgeport	Baldwin	1730 6-1868	0-6-0	15x18"	42"	47250
			Sc. 1883				





P. & R. #970—Baldwin, 1888. Used on "Market Express"—Phila. to Reading. David Lowe, Engineer.



—Courtesy of Baldwin Locomotive Works.

A. C. R. R. #1027—Baldwin, 1896.

No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.
300	Chestnut Hill	Baldwin	2011 Sc. 1881	11-1869 4-4-0	13x24"	46¾"	46125
301	Conshohocken	Baldwin	744 Sc. 1881	2-1857 4-4-0	13½x24"	54"	42700
302	Carlisle	Baldwin	1211	2-1864 4-4-0	13½x24"	60"	45000
	Sold—Harrisburg	& Potomac R. R.	4-1880				
303	E. C. Dale	Baldwin	1592 Sold 1883	3-1867 0-6-0	15x18"	44"	52000
304	Downingtown	Baldwin	530 Sc. 1876	5-1853 0-6-0	12½x18"	42"	41800
305	Mount Airy	Baldwin	1991 Sc. 1883	10-1869 0-6-0	15x18"	42"	47250
306	Manayunk	Baldwin	692 Sc. 1881	4-1856 4-4-0	13½x24"	54"	42700
307	Manatawna	Baldwin	1213	2-1864 4-4-0	13½x24"	60"	45000
	Sold—Western R.	R. of North Carolina	9-1872				
308	Nicetown	Baldwin	1700 Sold 1881	2-1868 4-4-0	13x24"	56"	46125
309	Norristown	Baldwin	593 Sc. 1881	5-1854 0-6-0	14½x18"	42"	41800
310	Oakland	Baldwin	1424 Sold 1881	11-1865 4-4-0	14x24"	54"	53000
311	Plymouth	Baldwin	2161	6-1870 4-6-0	16x24"	54"	55125
	Sold—Pa. Nut &	Bolt Co.	6-1899				
312	Quaker City	Baldwin	772	7-1857 4-4-0	13x24"	60"	43800
	Sold—Riverside	Iron Wks.	7-1872				
313	Rockland	Baldwin	687 Sc. 1876	3-1856 0-6-0	14½x18"	42"	41800
314	Roxborough	Baldwin	843 Sc. 1876	3-1859 4-4-0	13x24"	54"	44800
315	Superior	Baldwin	616 Sc. 1876	9-1854 4-4-0	13½x24"	54"	42700
316	Stanhope	Baldwin	721 Sc. 1877	10-1856 4-4-0	12½x24"	60"	43800
317	Spring Mill	Baldwin	729 Sc. 1878	11-1856 4-4-0	13½x24"	54"	42700
318	Thorndale	Baldwin	1679 Sc. 1883	12-1867 0-6-0	15x18"	44"	52000
319	Tioga	Baldwin	714	8-1856 4-4-0	12½x24"	60"	43800
	Sold—Wicomico &	Roanoke R. R.	7-1872				
320	Wayne	Baldwin	1908 Sc. 1881	6-1869 4-4-0	13x24"	57¾"	?

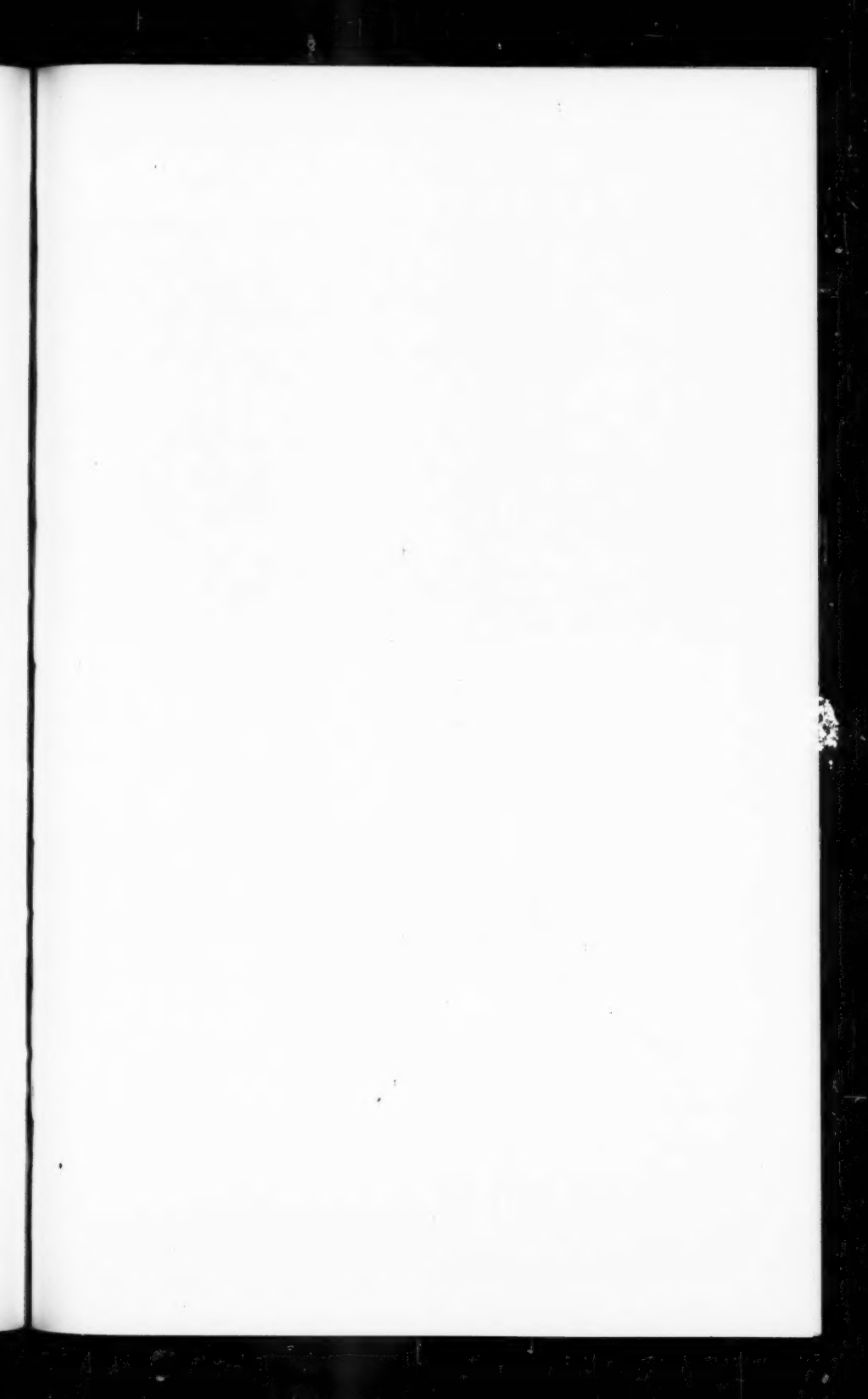
Nos. 298-320 were received from the Philadelphia, Germantown & Norristown R. R., and entered service on the P & R Dec. 1870. They were replaced by the following locomotives:

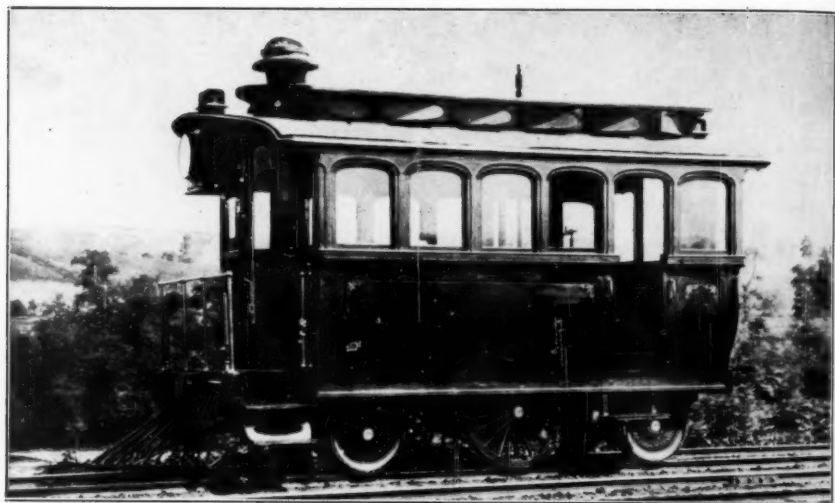
298		P & R	11-1880	0-4-0W	13x16"	35"	31200	
	Sold—Poulterer & Co.		5-1894					
299	1286	P & R	6-1883	0-6-0W	16x18"	43"	61600	
300		Baldwin	5651	5-1881	2-8-0W	20x24"	50½"	114000
	748	P & R*	1-1898	2-8-0W	20x24"	50½"	114000	
301	744	Baldwin	5658	6-1881	2-8-0W	20x24"	50½"	114000
302	745	Baldwin	5669	6-1881	2-8-0W	20x24"	51½"	114000
303	1287	P & R	7-1883	0-6-0W	16x18"	43"	61600	
304	139	P & R	2-1876	4-4-0	17x22"	68½"	75400	
305	1288	P & R	8-1883	0-6-0W	16x18"	43"	61600	
306	746	Baldwin	5678	6-1881	2-8-0W	20x24"	50½"	114000
307	125	P & R	4-1873	4-4-0	17x22"	61½"	73300	
308	747	Baldwin	5680	6-1881	2-8-0W	20x24"	50½"	114000
309	163	P & R	3-1881	4-4-0W	18½x22"	68½"	95000	
310	749	Baldwin	5699	6-1881	2-8-0W	20x24"	50½"	114000

No.	Name & 1900 #	Builder		Date	Type	Cyl.	Dr.	Wt.
311	1015	Baldwin	17348	1-1900	2-8-0	22x28"	56"	165000
312	124	P & R		9-1872	4-4-0	17x22"	61½"	73300
313	5	P & R		3-1876	4-4-0	17x22"	68½"	75400
	Sold—Atlantic City	R. R.		2-1889	Renumbered 1009			
314	132	P & R		5-1876	4-4-0	17x22"	61½"	73300
315	133	P & R		5-1876	4-4-0	17x22"	61½"	73300
316	505	P & R		10-1877	4-6-0	18x24"	54"	89000
317	976	Baldwin	16505	2-1899	2-8-0	22x28"	56"	163000
318	1289	P & R		8-1883	0-6-0W	16x18"	43"	61600
319	126	P & R		4-1873	4-4-0	17x22"	61½"	73300
320		Baldwin	5700	6-1881	2-8-0W	20x24"	50½"	114000
	754	P & R*		5-1899	2-8-0W	20x24"	51½"	114000
321	Grecian (431)	P & R		3-1871	4-6-0	18x22"	48"	85000
322	Italian (432)	P & R		5-1871	4-6-0	18x22"	48"	85000
323	Denver (115)	P & R		6-1871	4-4-0	15x20"	61"	68000
	Sold—P & R C & I Co.			8-1889	Returned in 1899			
324	Duluth	P & R		7-1871	4-4-0	15x20"	61"	68000
			Sc.	4-1900				
325	Ionian (433)	P & R		7-1871	4-6-0	18x22"	48"	85000
326	Saturn (1265)	P & R		7-1871	0-6-0	16x18"	43"	64000
327	Moravian (434)	P & R		8-1871	4-6-0	18x22"	48"	85000
328	Sitka (116)	P & R		8-1871	4-4-0	15x20"	61"	68000
329	Corinthian (435)	P & R		8-1871	4-6-0	18x22"	48"	85000
330	Oneida (117)	P & R		9-1871	4-4-0	15x20"	61"	68000
331	Syrian (31)	P & R		10-1871	4-6-0	18x22"	48"	84000
	Sold—Atlantic City	R. R.		2-1889	Renumbered 1021			
332	Ermine	P & R		10-1871	0-4-0	9x16"	34"	25500
	Sold—P & R C & I Co.			8-1889				
333	Mole	P & R		10-1871	0-4-0	9x16"	34"	25500
			Sc.	12-1897				
333	564	Baldwin	15908	5-1898	4-6-0	14-24x26"	61"	152000
334	Aurora (1256)	P & R		10-1871	0-6-0	16x18"	43"	64000
335	Apollo (1257)	P & R		11-1871	0-6-0	16x18"	43"	64000
336	Caucasian (436)	P & R		11-1871	4-6-0	18x22"	48"	85000
337	Hibernian (437)	P & R		11-1871	4-6-0	18x22"	48"	85000
338	Mongolian (438)	P & R		11-1871	4-6-0	18x22"	48"	85000
This was the last name applied to a locomotive on this road save for two inspection locomotives. The following month #339 was completed in the Reading Shops but she carried no name. Altho' subsequent engines in this list will be found with names, they came from roads acquired by the P & R and they were retained until such time as they were removed.								
339		P & R		12-1871	4-6-0	18x22"	48"	85000
	457	P & R*		—	4-6-0	18x22"	48"	92100
340		P & R		1-1872	0-6-0	16x18"	43"	64000
			Sc.	8-1898				
340	977	Baldwin	16506	2-1899	2-8-0	22x28"	56"	163000
341	1258	P & R		2-1872	0-6-0	16x18"	43"	64000
342	1259	P & R		3-1872	0-6-0	16x18"	43"	64000
343		P & R		5-1872	0-10-0	20x26"	42¾"	88700
	Sold—Poulterer & Co.			11-1898				
343	978	Baldwin	16507	2-1899	2-8-0	22x28"	56"	163000
344		P & R		6-1872	0-10-0	Like #343		
	Sold—Pa. Nut & Bolt Co.			11-1898				
344	979	Baldwin	16508	2-1899	2-8-0	22x28"	56"	163000
345	Boston	P & R		10-1865	4-6-0	18x22"	48"	84000
	459	P & R*		1889	4-6-0	18x22"	48"	91300
346	Baltimore	P & R*		—	0-8-0	18x22"	43"	79800
	Renumbered 1421.	4-1900.						
347	Lorberry	S & S*		—	?	?	?	?
			Sc.	1881				
348	Susquehanna	P & R*		—	4-4-0	Sc. 1881		

No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.	
349	Schuykill	P & R	—	4-4-0	Sc. 1881			
350	Tremont	P & R	—	?	Sc. 1876			
351	Lark	P & R	—	4-4-0	Sc. 1875			
Nos. 345-351 were received from the Schuykill & Susquehanna R. R. and entered service on the P & R in June, 1872. They were replaced by the following:								
347	750	Baldwin	5710	7-1881	2-8-0W 20x24"	50½"	114000	
348		P & R		4-1881	4-4-0W 18½x22"	68½"	95000	
	177	P & R*		7-1899	4-4-0W 18½x22"	61½"	93000	
349	164	P & R		7-1881	4-4-0W 18½x22"	68½"	95000	
350	131	P & R		4-1876	4-4-0	17x22"	61½"	73300
351	130	P & R		5-1875	4-4-0	17x22"	61½"	73300
352		P & R		10-1872	4-6-0	18x22"	48"	84000
	452	P & R*		7-1888	4-6-0	18x22"	48"	92100
353	442	P & R		10-1872	4-6-0	18x22"	48"	85000
354	CRR 1	Hinkley	238	6-1849	4-4-0	16x20"	54"	45000
			Sc. 1875					
355	2	Hinkley	241	6-1849	4-4-0	16x20"	54"	45000
			Sc. 1875					
356	3	Baldwin	1074	8-1862	4-6-0	17½x22"	48"	67500
			Sc. 1882					
357	4	Baldwin	1076	8-1862	4-6-0	17½x22"	48"	67500
			Sc. 4-1884					
358	5	Baldwin	1078	9-1862	4-6-0	17½x22"	48"	67500
			Sc. 1883					
359	6	Baldwin	1080	9-1862	4-6-0	17½x22"	48"	67500
			Sc. 1883					
360	7	Baldwin	1984	10-1869	4-4-0	17½x24"	60"	63000
	Sold—Poulterer & Co.			11-1898				
361	CRR 8	Baldwin	1118	3-1863	4-6-0	17½x22"	48"	67500
			Sc. 1882					
362	9	Baldwin	1121	3-1863	4-6-0	17½x22"	48"	67500
			Sc. 1882					
363	10	Baldwin	2741	3-1872	0-6-0T	15x22"	46"	70000
	Renumbered 1251, 4-1900.							
364	CRR 11	Baldwin	1224	3-1864	4-6-0	17½x22"	48"	67500
			Sc. 1883					
365	12	C R R*		1863	4-4-0	16x24"	60"	58500
			Sc. 1875					
366	13	Baldwin	1225	3-1864	4-6-0	17½x22"	48"	67500
			Sc. 4-1884					
367	CRR 14	New Jersey L W		1856	4-4-0	16x22"	60"	54000
			Sc. 1881					
368	15	J. Brandt		1856	4-4-0	16¼x22"	60"	55125
			Sc. 1881					
369	16	J. Brandt		1856	4-4-0	16¼x22"	60"	55125
			Sc. 1881					
370	17	J. Brandt		1857	4-4-0	16¼x22"	60"	55125
			Sc. 1876					
371	18	J. Brandt		1857	4-4-0	16¼x22"	60"	55125
			Sc. 1881					
372	23	Baldwin	1230	4-1864	4-6-0	17½x22"	48"	67500
			Sc. 1883					
373	24	Baldwin	1233	4-1864	4-6-0	17½x22"	48"	67500
Nos. 354-373 were received from the Catawissa R. R. and entered service on the P & R Nov. 1872. The Catawissa number follows the P & R road number. They were replaced by the following:								
354	137	P & R		10-1875	4-4-0	17x22"	68½"	75400
355	138	P & R		11-1875	4-4-0	17x22"	68½"	75400
356	171	P & R		12-1882	4-4-0W 18½x22"	68½"	95000	
357	174	P & R		3-1884	4-4-0W 18½x22"	68½"	95000	

No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.
358		P & R	1-1883	4-4-0W18½x22"	68½"	95000	
	197	P & R*	8-1898	4-4-0W18½x22"	68½"	100000	
359	172	P & R	2-1883	4-4-0W18½x22"	68½"	95000	
360	980	Baldwin	16509	2-1899	2-8-0 22x28"	56"	163000
361		P & R	3-1882	4-4-0W18½x22"	68½"	93000	
	179	P & R*	5-1898	4-4-0W18½x22"	68½"	93000	
362	785	Baldwin	6352	8-1882	2-8-0W 20x24"	50½"	114000
364	173	P & R	4-1883	4-4-0W18½x22"	68½"	95000	
365	4	P & R	6-1875	4-4-0 17x22"	61½"	73300	
	Sold—Atlantic City	R. R.	2-1889	Renumbered 1008			
365	933	Baldwin	15039	9-1896	2-8-0 14-24x26"	55½"	146000
366		P & R	2-1884	4-4-0W18½x22"	68½"	95000	
	199	P & R*	2-1898	4-4-0W18½x22"	68½"	110375	
367	751	Baldwin	5711	7-1881	2-8-0W 20x24"	50½"	114000
368	752	Baldwin	5716	7-1881	2-8-0W 20x24"	50½"	114000
369	753	Baldwin	5723	7-1881	2-8-0W 20x24"	50½"	114000
370	123	P & R	4-1876	4-4-0 17x22"	61½"	73300	
371	756	Baldwin	5732	7-1881	2-8-0W 20x24"	50½"	114000
372		P & R	3-1883	4-4-0W18½x22"	68½"	95000	
	198	P & R*	4-1898	4-4-0W18½x22"	68½"	100000	
373		P & R	9-1882	4-4-0W18½x22"	68½"	95000	
	196	P & R*	6-1897	4-4-0W18½x22"	68½"	100000	
374	443	P & R	11-1872	4-6-0 18x22"	48"	85000	
375	444	P. & R	11-1872	4-6-0 18x22"	48"	85000	
376		P & R	12-1872	4-6-0 18x22"	48"	85000	
		Sc.	7-1897				
376	311	Baldwin	15880	4-4-2W13-22x26"	84¼"	153800	
377		P & R	12-1872	4-6-0 18x22"	48"	85000	
		Sc.	8-1897				
377	312	Baldwin	15881	4-4-2W13-22x26"	84¼"	153800	
378		P & R	1-1873	4-6-0 18x22"	48"	85000	
		Sc.	4-1894				
378	317	Baldwin	14675	1-1896	4-2-2W13-22x26"	84¼"	122000
379	445	P & R	1-1873	4-6-0 18x22"	48"	85000	
380	491	P & R	5-1873	4-6-0 18x24"	54"	89000	
381		P & R	6-1873	4-4-0 17x22"	?	?	
		Sc.	5-1900				
382	492	P & R	6-1873	4-6-0 18x24"	54"	89000	
383	82	P & R	6-1873	4-4-0 17x22"	61½"	73300	
	Sold—Reading & Columbia	R. R.	1-1898	Renumbered 1092			
383	313	Baldwin	15883	4-4-2W13-22x26"	84¼"	153800	
384		P & R	6-1873	0-4-0 9x16"	34"	25500	
		Sc.	4-1897				
384	314	Baldwin	15883	4-4-2W13-22x26"	84¼"	153800	
385		P & R	7-1873	0-4-0 9x16"	34"	25500	
	Sold—Poulterer & Co.		5-1894				
385	316	Baldwin	14336	6-1895	4-2-2W13-22x26"	84"	122400
386		P & R	7-1873	4-6-0 18x24"	54"	89000	
	518	P & R*	—	4-6-0W 18x24"	54"	103400	
387		P & R	7-1873	4-4-0 17x22"	61½"	?	
	Sold—Pa. Nut & Bolt Co.		6-1899				
387	1016	Baldwin	17349	1-1900	2-8-0 22x28"	56"	165000
388	493	P & R	4-1873	4-6-0 18x24"	54"	89000	
389	127	P & R	8-1873	4-4-0 17x22"	61½"	73300	
390		P & R	8-1873	4-6-0 18x24"	54"	89000	
	521	P & R*	—	4-6-0W 18x24"	54"	103400	
391	494	P & R	9-1873	4-6-0 18x24"	54"	89000	
392	495	P & R	9-1873	4-6-0 18x24"	54"	89000	
393		P & R	9-1873	4-6-0 18x24"	54"	89000	
	510	P & R*	11-1888	4-6-0 18x24"	54"	95000	





P. & R. "Ariel"—Reading Shops, 1872.

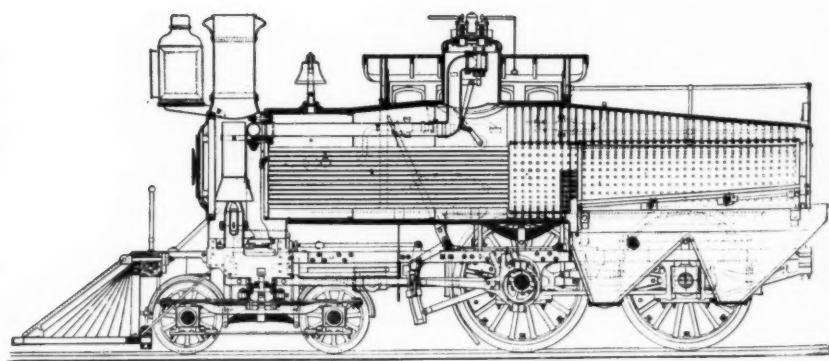


Fig. 10

LONGITUDINAL SECTION OF FAST EXPRESS LOCOMOTIVE WITH J. E. WOOTTEN'S FIRE-BOX

Built by the Philadelphia & Reading Railroad Co. at Reading, Pa.

(Horizontal section, Jan. 1, 1873.)

See description, p. 200.

Longitudinal Section of Fast Express Engine with Wootten firebox.

No.	Name & 1900 #	Builder		Date	Type	Cyl.	Dr.	Wt.
394		P & R		10-1873	4-6-0	18x24"	54"	89000
	509	P & R*		—	4-6-0	18x24"	54"	95000
395		P & R		10-1873	4-6-0	18x24"	54"	89000
	519	P & R*		5-1891	4-6-0W	18x24"	54"	103400
396	128	P & R		4-1874	4-4-0	17x22"	61½"	73300
397		P & R		4-1874	4-4-0	17x22"	61½"	73300
	Sold—Pa. Nut & Bolt Co.			6-1899				
397	1017	Baldwin	17350	1-1900	2-8-0	22x28"	56"	165000
398	136	P & R		6-1874	4-4-0	17x22"	68½"	75400
399	129	P & R		7-1874	4-4-0	17x22"	61½"	73300
400	Kittatinny	Baldwin	704	6-1856	0-8-0	16x20"	42"	44000
	From Reading & Lehigh R. R.		Sc.	1876				
400	134	P & R		6-1876	4-4-0	17x22"	61½"	73300
401	Maiden Creek	Baldwin	3450	10-1873	2-6-0	17x22"	48"	63000
	From Berks Co. R. R. #1		Sc.	3-1900				
402		Baldwin	3411	9-1873	2-6-0	17x22"	48"	63000
			Sc.	2-1900				
403	1450	Baldwin	3413	9-1873	2-6-0	17x22"	48"	63000
404	Slatington (1451)	Baldwin	3452	10-1873	2-6-0	17x22"	48"	63000
	From Berks Co. R. R. #2							
405	501	P & R		4-1876	4-6-0	18x24"	54"	89000
406	502	P & R		9-1876	4-6-0	18x24"	54"	89000
407	503	P & R		10-1876	4-6-0	18x24"	54"	89000
408		P & R		1-1877	4-6-0W	18x24"	54"	98300
	508	P & R*		—	4-6-0	18x24"	54"	95000
409	141	P & R		9-1876	4-4-0	17x22"	68½"	75400
410	135	P & R		3-1878	4-4-0	17x22"	61½"	73300
411	206	P & R		5-1880	4-4-0W	21x22"	68½"	103000
412	513	P & R		3-1878	4-6-0W	18x24"	54"	98300
413	702	Baldwin	4921	1-1880	2-8-0W	20x24"	50½"	113900
414	703	Baldwin	4932	1-1880	2-8-0W	20x24"	50½"	113900
415	704	Baldwin	4935	1-1880	2-8-0W	20x24"	50½"	113900
416	705	Baldwin	4936	1-1880	2-8-0W	20x24"	50½"	113900
417	706	Baldwin	4937	1-1880	2-8-0W	20x24"	50½"	113900
418		Baldwin	4939	1-1880	2-8-0W	20x24"	50½"	113900
	714	P & R*		2-1899	2-8-0W	20x24"	50½"	120000
419	707	Baldwin	4949	2-1880	2-8-0W	20x24"	50½"	113900
420	708	Baldwin	4952	2-1880	2-8-0W	20x24"	50½"	113900
421	709	Baldwin	4954	2-1880	2-8-0W	20x24"	50½"	113900
422	710	Baldwin	4958	2-1880	2-8-0W	20x24"	50½"	113900
423	711	Baldwin	4962	2-1880	2-8-0W	20x24"	50½"	113900
424	712	Baldwin	4965	2-1880	2-8-0W	20x24"	50½"	113900
425	713	Baldwin	4969	2-1880	2-8-0W	20x24"	50½"	113900
426	715	Baldwin	4970	2-1880	2-8-0W	20x24"	50½"	113900
427		Baldwin	4978	2-1880	2-8-0W	20x24"	50½"	113900
	722	P & R*		12-1898	2-8-0W	20x24"	50½"	129000
428	716	Baldwin	4977	2-1880	2-8-0W	20x24"	50½"	113900
429	717	Baldwin	4989	3-1880	2-8-0W	20x24"	50½"	113900
430	718	Baldwin	4991	3-1880	2-8-0W	20x24"	50½"	113900
431		Baldwin	4999	3-1880	2-8-0W	20x24"	50½"	113900
	723	P & R*		11-1898	2-8-0W	20x24"	50½"	120900
432	719	Baldwin	5001	3-1880	2-8-0W	20x24"	50½"	113900
433	2 (1)	Baldwin	3675	12-1874	4-4-0	14x24"	58"	67000
	Sold—Atlantic City R R			3-1898		Renumbered 1001		
434	3	Baldwin	638	3-1855	4-4-0	15x22"	54"	53400
			Sc.	1881				
435	4	Baldwin	1800	12-1868	4-4-0	16x24"	62"	73000
	Sold—Pa. Nut & Bolt Co.			11-1898				
436	5	Baldwin	1971	9-1869	4-6-0	18x22"	52"	82000
	Sold—Poulterer & Co.			11-1898				

No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.
437	7	Baldwin	1324 12-1864	4-6-0	18x22"	50"	70000
			Sc. 1883				
438	8 (522)	Baldwin	2156 6-1870	4-6-0	18x22"	52"	82000
439	9	P & R*	1873 4-4-0		15x22"	60"	59000
			Sc. 12-1885				
440	10	Baldwin	1160 8-1863	0-4-0	11x16"	36"	33000
			Sc. 8-1884				
441	11 (527)	Baldwin	3583 5-1874	4-6-0	18x22"	52"	87000
442	12	J. Brandt	1857 4-4-0		15x24"	60"	58000
			Sc. 8-1882				
443	13	Baldwin	1201 1-1864	4-6-0	18x22"	50"	70000
			Sc. 12-1883				
444	14 (528)	Baldwin	3666 11-1874	4-6-0	18x22"	52"	87000
445	15 (1238)	Baldwin	4449 10-1878	0-4-0	11x16"	36"	41000
	Renumbered 1058		11-1886				
446	16 (1234)	Baldwin	3490 11-1873	0-4-0	11x16"	36"	38000
447	17	Baldwin	1340 2-1865	4-6-0	18x22"	50"	70000
			Sc. 1881				
448	18	Baldwin	996 4-1861	4-4-0	14x24"	60"	51250
			Sc. 11-1883				
449	19	Baldwin	1223 3-1864	4-4-0	15x24"	60"	54000
			Sc. 5-1884				
450	20	Baldwin	1208 2-1864	4-6-0	18x22"	50"	70000
			Sc. 6-1881				
451	21	Baldwin	1314 11-1864	4-4-0	15x24"	60"	54000
			Sc. 1883				
452	22	Baldwin	1339 2-1865	4-6-0	18x22"	50"	70000
			Sc. 6-1884				
453	23	Baldwin	1489 3-1866	4-6-0	18x22"	54"	72000
			Sc. 10-1882				
454	24	Baldwin	1674 11-1867	4-4-0	16x24"	60"	73000
			Sc. 4-1900				
455	25	Baldwin	1675 11-1867	4-4-0	16x24"	60"	73000
	Sold—Pa. Nut & Bolt Co.		11-1899				
456	26 (523)	Baldwin	1733 6-1868	4-6-0	18x22"	52"	82000
457	27	Baldwin	1799 11-1868	4-4-0	16x24"	60"	73000
			Sc. 3-1897				
458	28 (524)	Baldwin	1813 12-1868	4-6-0	18x22"	52"	82000
459	29	Baldwin	1968 9-1869	4-6-0	18x22"	52"	82000
			Sc. 3-1895				
460	30 (1235)	Baldwin	2044 12-1869	0-4-0	11x16"	36"	33000
461	31	Baldwin	2043 12-1869	4-6-0	18x22"	52"	82000
	Sold—Pa. Nut & Bolt Co.		11-1898				
462	32 (119)	Baldwin	2148 5-1870	4-4-0	16x24"	60"	73000
463	33	Baldwin	2105 3-1870	0-4-0	11x16"	36"	33000
	Sold—West Point Iron Co.		5-1886				
464	34	Baldwin	2205 8-1870	4-4-0	16x24"	60"	73000
	Sold—Pa. Nut & Bolt Co.		11-1898				
465	35 (525)	Baldwin	2203 8-1870	4-6-0	18x22"	52"	80500
466	36 (526)	Baldwin	2204 8-1870	4-6-0	18x22"	52"	80500
467	37	Baldwin	2207 8-1870	4-6-0	18x22"	52"	80500
			Sc. 8-1894				
468	38	Baldwin	2827 6-1872	4-4-0	16x24"	62"	73000
			Sc. 4-1900				
469	39 (120)	Baldwin	2858 7-1872	4-4-0	16x24"	62"	73000
470	40 (1239)	Baldwin	3115 1-1873	0-4-0	11x16"	36"	38000
	Renumbered 1059		12-1886				
471	41 (112)	Baldwin	3219 4-1873	4-4-0	15x24"	44"	61000
472	42 (2)	Baldwin	3239 4-1873	4-4-0	14x24"	58"	67000
	Sold—Atlantic City R R		2-1889		Renumbered 1010		
473	43 (1236)	Baldwin	3509 11-1873	0-4-0	11x16"	36"	38000

No.	Name & 1900 #	Builder		Date	Type	Cyl.	Dr.	Wt.
474	44 (3)	Baldwin	3507	11-1873	4-4-0	15x24"	58"	61000
	Sold—Atlantic City R R			1-1898	Renumbered 1003			
475	45	Baldwin	3579	5-1874	4-4-0	15x24"	58"	61600
	Sold—Pa. Nut & Bolt Co.			11-1898				
476	46 (113)	Baldwin	3642	9-1874	4-4-0	15x24"	58"	61000
477	47 (114)	Baldwin	3643	9-1874	4-4-0	15x24"	58"	61000
478	48 (1202)	Baldwin	3773	9-1875	0-4-0	14x22"	44"	56000
479	49 (142)	Baldwin	3790	11-1875	4-4-0	17x24"	61"	88000
480	50	Baldwin	3791	11-1875	4-4-0	17x24"	61"	88000
	(226)	P & R*		3-1881	4-4-0W	17x24"	68½"	90000
481	51	Baldwin	3870	4-1876	4-4-0	17x24"	61"	88000
	227	P & R*		11-1880	4-4-0W	17x24"	68½"	90000
482	52	Baldwin	3872	4-1876	4-4-0	17x24"	61"	88000
	230	P & R*		6-1898	4-4-0W	17x24"	68½"	94000
483	53	Baldwin	3914	6-1876	4-6-0	18x22"	52"	87000
		Sc.		4-1881				
484	54 (529)	Baldwin	3920	6-1876	4-6-0	18x22"	52"	87000
485	55 (1203)	Baldwin	3936	7-1876	0-4-0	14x22"	44"	56000
486	56 (1237)	Baldwin	3941	7-1876	0-4-0	11x16"	36"	41000
487	57	Baldwin	3973	8-1876	4-4-0	17x24"	61"	88000
		Sc.		2-1900				
488	58	Baldwin	3974	8-1876	4-4-0	17x24"	61"	88000

Sold—Poulterer & Co. 11-1898
The above group of engines were received from the North Pennsylvania R. R., and placed in service on the P & R in May, 1879. The No. Penn. R. R. immediately follows the P & R number and the P & R number of 1900 is given in ().

489	101 (143)	Baldwin	3847	3-1876	4-4-0	17x24"	61"	88000
490	102 (228)	Baldwin	3850	4-1876	4-4-0	17x24"	61"	88000
		P & R*		—	4-4-0W	17x24"	68½"	90000
491	103 (229)	Baldwin	3874	4-1876	4-4-0	17x24"	61"	88000
		P & R*		—	4-4-0W	17x24"	68½"	90000
492	104 (530)	Baldwin	3932	6-1876	4-6-0	18x22"	52"	87000
493	105 (144)	Baldwin	3975	8-1876	4-4-0	17x24"	61"	88000
494	106 (118)	Baldwin	3860	4-1876	4-4-0	17x22"	61"	?
495	107	Grant		—	?	?	?	?
	Sold—Atlantic City R R			2-1889	Renumbered 1006			

The above seven locomotives were received from the Delaware & Bound Brook R. R. and were placed in service on the P & R in May, 1879. The indication of numbers is the same as in the No. Penn. R. R. series.

All of the above engines that were scrapped prior to 1900 were replaced by the following:

433	565	Baldwin	16656	4-1899	4-6-0W	14-24x26"	61"	161000
434		Baldwin	5726	7-1881	2-8-0W	20x24"	50½"	114000
	757	P & R*		1-1898	2-8-0W	20x24"	50½"	119600
435	566	Baldwin	16657	4-1899	4-6-0W	14-24x26"	61"	161000
436	567	Baldwin	16658	4-1899	4-6-0W	14-24x26"	61"	161000
437	1292	P & R		10-1883	0-6-0W	16x18"	43"	61600
439	203	P & R		8-1886	4-4-0W	18½x22"	68½"	104500
440	190	P & R		4-1884	4-4-0W	18½x22"	68½"	97800
		P & R*		—	4-4-0W	18½x22"	61½"	97000
442	169	P & R		8-1882	4-4-0W	18½x22"	68½"	95000
443	200	P & R		2-1884	4-4-0W	18½x22"	68½"	?
		P & R*		5-1898	4-4-0W	18½x22"	68½"	100000
447	758	Baldwin	5738	7-1881	2-8-0W	20x24"	50½"	114000
448	188	P & R		2-1884	4-4-0W	18½x22"	61½"	97800
		P & R*		8-1898	4-4-0W	18½x22"	61½"	97000
449	156	P & R		4-1884	4-4-0W	18½x22"	61½"	97800
450		P & R		6-1881	0-4-0W	?	?	53000
		Sc.		3-1897				
450	568	Baldwin	16659	4-1899	4-6-0W	14-24x26"	61"	161000

No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.	
451	1290	P & R	9-1883	0-6-0W	16x18"	43"	61600	
452	158	P & R	5-1884	4-4-0W	18½x22"	61½"	97800	
453	170	P & R	10-1882	4-4-0W	18½x22"	61½"	97000	
		P & R*	11-1899	4-4-0W	18½x22"	68½"	100000	
455	569	Baldwin	16660	4-1899	4-6-0W	14-24x26"	61"	161000
457	1302	Baldwin	16617	4-1899	0-6-0W	20x24"	50"	121000
459	934	Baldwin	15040	9-1896	2-8-0W	14-24x26"	55½"	146000
461	1303	Baldwin	16618	4-1899	0-6-0W	20x24"	50"	121000
463	1295	P & R	11-1886	0-6-0W	16x22"	44"	74300	
464	1304	Baldwin	16619	4-1899	0-6-0W	20x24"	50"	121000
467	935	Baldwin	15041	9-1886	2-8-0W	14-24x26"	55½"	146000
470	1296	P & R	11-1886	0-6-0W	16x22"	44"	74300	
472	936	Baldwin	15042	9-1896	2-8-0W	14-24x26"	55½"	146000
474	1305	Baldwin	16620	4-1899	0-6-0W	20x24"	50"	121000
475	1306	Baldwin	16621	4-1899	0-6-0W	20x24"	50"	121000
483	701	Baldwin	5570	4-1881	2-8-0W	20x24"	50½"	114000
488	1018	Baldwin	17351	1-1900	2-8-0W	22x28"	56"	165000
495	937	Baldwin	15043	9-1896	2-8-0W	14-24x26"	55½"	146000

2-8-0W 20x24" 50½" 120# 98300 113900 19390# T. E.

496	720	Baldwin	5013	3-1880			
497	721	Baldwin	5019	3-1880			
498	724	Baldwin	5035	4-1880			
499	725	Baldwin	5036	4-1880			
500	726	Baldwin	5047	4-1880			
501	727	Baldwin	5050	4-1880			
502	728	Baldwin	5065	5-1880			
503	729	Baldwin	5075	5-1880			
504	759	Baldwin	6156	4-1882	2-8-0W	20x24"	50½" 114000
505	760	Baldwin	6154	4-1882	2-8-0	20x24"	50½" 114000
506	207	P & R	6-1880	4-4-0W	21x22"	68½"	103000
507		Baldwin	5000	3-1880	4-2-2W	18x24"	78" 85000

Eames Vacuum Brake Locomotive, returned to builder, 1880 and sold to Lovett Eames.

2-8-0W 20x24" 50½" 120# 99500 114000 19390# T. E.
(a) 2-8-0W 20x24" 50½" 150# 104100 119600 24235 (rebuild)

507	761	Baldwin	6164	4-1882	524	778	Baldwin	6299	7-1882
508	762	Baldwin	6166	4-1882	525	779	Baldwin	6302	7-1882
509	763	Baldwin	6200	5-1882	526	780	Baldwin	6306	7-1882
510		Baldwin	6201	5-1882	527	781	Baldwin	6310	7-1882
	764	P & R* (a)		5-1897	528	782	Baldwin	6309	7-1882
511	765	Baldwin	6213	5-1882	529	783	Baldwin	6329	8-1882
512	766	Baldwin	6214	5-1882	530	784	Baldwin	6332	8-1882
513		Baldwin	6222	5-1882	531	786	Baldwin	6340	8-1882
	772	P & R* (a)		12-1898	532	787	Baldwin	6341	8-1882
514		Baldwin	6221	5-1882	533	789	Baldwin	6834	7-1883
	773	P & R* (a)		12-1898	534	790	Baldwin	6833	7-1883
515	767	Baldwin	6237	6-1882	535		Baldwin	6849	7-1883
516	768	Baldwin	6241	6-1882		791	P & R* (a)		11-1898
517	769	Baldwin	6242	6-1882	536		Baldwin	6854	7-1883
518		Baldwin	6243	6-1882		792	P & R* (a)		12-1898
	774	P & R* (a)		1-1899	537	793	Baldwin	6865	7-1883
519	770	Baldwin	6255	6-1882	538	794	Baldwin	6859	7-1883
520	771	Baldwin	6259	6-1882	539	795	Baldwin	6872	8-1883
521	775	Baldwin	6274	7-1882	540	796	Baldwin	6870	7-1883
522	776	Baldwin	6278	7-1882	541	797	Baldwin	6877	8-1883
523	777	Baldwin	6295	7-1882	542	798	Baldwin	6881	8-1883

543 Allentown Iron Co. (?) 5-1889 (?) No data—Sc. 8-1898.
 543 1019 Baldwin 17352 1-1900 2-8-0 22x28" 56" 165000

		0-4-0	13x22"	44"	145#	60000	12080#	T. E.		
544	1221	Baldwin	10694	2-1890		549	1220	Baldwin	10650	2-1890
545	1216	Baldwin	10519	12-1889		550	1222	Baldwin	10645	2-1890
546	1217	Baldwin	10517	12-1889		551	1223	Baldwin	10655	2-1890
547	1218	Baldwin	10547	1-1890		552	1224	Baldwin	10693	2-1890
548	1219	Baldwin	10548	1-1890		553	1225	Baldwin	10696	2-1890

		4-6-0W	20x24"	61½"	145#	93000	121000	19240#	T. E.		
554	531	Baldwin	10705	3-1890		562	539	Baldwin	10723	3-1890	
555	532	Baldwin	10706	3-1890		563		Baldwin	10722	3-1890	
556	533	Baldwin	10707	3-1890			540	P & R*		9-1893	
557	534	Baldwin	10708	3-1890		564	541	Baldwin	10729	3-1890	
558	535	Baldwin	10718	3-1890		565	542	Baldwin	10724	3-1890	
559	536	Baldwin	10712	3-1890		566	543	Baldwin	10737	3-1890	
560	537	Baldwin	10719	3-1890		567	544	Baldwin	10748	3-1890	
561	538	Baldwin	10720	3-1890		568	545	Baldwin	10745	3-1890	

		4-4-0W	21x22"	68½"	160#	73000	107000	19260#	T. E.		
569	212	Baldwin	10901	3-1890		574	217	Baldwin	10938	6-1890	
570	213	Baldwin	10898	5-1890		575	218	Baldwin	10939	6-1890	
571	214	Baldwin	10902	5-1890		576	219	Baldwin	10940	6-1890	
572	215	Baldwin	10908	5-1890		577	220	Baldwin	10949	6-1890	
573	216	Baldwin	10918	5-1890		578	221	Baldwin	10956	6-1890	

		2-8-0W	20x24"	50½"	145#	105530	121700	24235#	T. E.		
579	876	Baldwin	10820	4-1890		584	881	Baldwin	10823	4-1890	
580	877	Baldwin	10821	4-1890		585	885	Baldwin	10899	5-1890	
581	878	Baldwin	10816	4-1890		586	882	Baldwin	10824	4-1890	
582	879	Baldwin	10817	4-1890		587	883	Baldwin	10829	4-1890	
583	880	Baldwin	10822	4-1890							

		2-8-0W	22x28"	50½"	145#	131600	146700	33075#	T. E.		
588	938	Baldwin	10808	4-1890		591	942	Baldwin	10826	4-1890	
589	939	Baldwin	10810	4-1890		592	941	Baldwin	10813	4-1890	
590	940	Baldwin	10809	4-1890		593	943	Baldwin	10827	4-1890	

		4-4-0W	21x22"	68½"	160#	73000	107000	19260#	T. E.		
594	222	Baldwin	10948	6-1890		596	224	Baldwin	10969	6-1890	
595	223	Baldwin	10955	6-1890		597	225	Baldwin	10971	6-1890	

The above four came from the Philadelphia & Seashore R. R. and were numbered 4, 5, 6 and 7 respectively.

		2-8-0W	14&24x26"	50½"	175#	131000	149000				
598	950	Baldwin	12351	12-1891		603	955	Baldwin	12366	12-1891	
599	951	Baldwin	12354	12-1891		604	956	Baldwin	12368	12-1891	
600	952	Baldwin	12359	12-1891		605	957	Baldwin	12369	12-1891	
601	953	Baldwin	12364	12-1891		606	958	Baldwin	12373	12-1891	
602	954	Baldwin	12366	12-1891		607	959	Baldwin	12374	12-1891	

		4-6-0W	13½&23x24"	61½"	175#	99200	130500	17330#	T. E.	
608	546	Baldwin	12382	12-1891		613	551	Baldwin	12401	1-1892
609	547	Baldwin	12383	12-1891		614	552	Baldwin	12402	1-1892
610	548	Baldwin	12379	12-1891		615	553	Baldwin	12418	1-1892
611	549	Baldwin	12393	1-1892		616	554	Baldwin	12425	1-1892
612	550	Baldwin	12396	1-1892		617	555	Baldwin	12424	1-1892

		2-4-2W	13&22x24"	78"	175#	73300	140000	12580#	T. E.	
618	301	Baldwin	12433	1-1892		621	304	Baldwin	12679	5-1892
619	302	Baldwin	12676	5-1892		622	305	Baldwin	12680	5-1892
620	303	Baldwin	12672	5-1892						

623	—	Baldwin	12481	2-1892	2-6-6TW	12-20x24"	62"	165000	
	1452	P & R*		3-1900	2-6-0W	12-20x24"	61½"	113000	

		0-4-0	14x22"	44"	145#	60000	12080#	T. E.		
624	1226	Baldwin	12750	6-1892		627	1229	Baldwin	12760	6-1892
625	1227	Baldwin	12751	6-1892		628	1230	Baldwin	12761	6-1892
626	1228	Baldwin	12757	6-1892						

		0-6-0W	20x24"	50"	145#	103000	23665#	T. E.		
629	1297	Baldwin	12763	6-1892		632	1300	Baldwin	12770	6-1892
630	1298	Baldwin	12764	6-1892		633	1301	Baldwin	12781	6-1892
631	1299	Baldwin	12769	6-1892						

		2-8-0W	14&24x26"	55½"	175#	127000	146000	22515#	T. E.	
634	888	Baldwin	12999	10-1892		657	911	Baldwin	13178	1-1893
635	889	Baldwin	13000	10-1892		658	912	Baldwin	13184	1-1893
636	890	Baldwin	13007	10-1892		659	913	Baldwin	13192	1-1893
637	891	Baldwin	13008	10-1892		660	914	Baldwin	13199	2-1893
638	892	Baldwin	13012	11-1892		661	915	Baldwin	13200	2-1893
639	893	Baldwin	13019	11-1892		662	916	Baldwin	13202	2-1893
640	894	Baldwin	13028	11-1892		663	917	Baldwin	13203	2-1893
641	895	Baldwin	13023	11-1892		664	918	Baldwin	13204	2-1893
642	896	Baldwin	13029	11-1892		665	919	Baldwin	13230	2-1893
643	897	Baldwin	13032	11-1892		666	920	Baldwin	13229	2-1893
644	898	Baldwin	13069	12-1892		667	921	Baldwin	13234	2-1893
645	899	Baldwin	13070	12-1892		668	922	Baldwin	13243	2-1893
646	900	Baldwin	13088	12-1892		669	923	Baldwin	13301	3-1893
647	901	Baldwin	13098	12-1892		670	924	Baldwin	13302	3-1893
648	902	Baldwin	13107	12-1892		671	925	Baldwin	13312	3-1893
649	903	Baldwin	13127	12-1892		672	926	Baldwin	13317	3-1893
650	904	Baldwin	13125	12-1892		673	927	Baldwin	13307	3-1893
651	905	Baldwin	13126	12-1892		674	932	Baldwin	13329	3-1893
652	906	Baldwin	13143	1-1893		675	928	Baldwin	13330	3-1893
653	907	Baldwin	13144	1-1893		676	929	Baldwin	13342	4-1893
654	908	Baldwin	13161	1-1893		677	930	Baldwin	13345	4-1893
655	909	Baldwin	13162	1-1893		678	931	Baldwin	13346	4-1893
656	910	Baldwin	13185	1-1893						

2-4-2W 13&22x24" 78" 175# 73300 140000 12580# T. E.

679	306	Baldwin	13408	5-1893	682	Baldwin	13412	5-1893
680	307	Baldwin	13409	5-1893	315	P & R*		1899
681	308	Baldwin	13411	5-1893	683	Baldwin	13413	5-1893
					694	310	Baldwin	13370 4-1893

The #682, when rebuilt by the P & R in 1899 was rebuilt to a 4-4-2, with a weight of 78700# on the drivers. Other dimensions the same.

2-8-0W 20x24" 50½" 120# 99500 114000 19390# T. E.
(a) W 20x24" 50½" 150# 104000 119600 24235# T. E. (rebuilt)

857	Baldwin	6974	10-1883	876	Baldwin	7197	3-1884
799	P & R* (a)		12-1898	817	P & R* (a)		12-1894
858	800 Baldwin	6976	10-1883	877	818 Baldwin	7207	3-1884
859	801 Baldwin	6993	10-1883	878	Baldwin	7214	3-1884
860	802 Baldwin	6999	10-1883		819 P & R* (a)		8-1897
861	803 Baldwin	7027	11-1883	879	Baldwin	7217	3-1884
862	Sc. Baldwin	7032	11-1883		820 P & R* (a)		11-1899
863	804 Baldwin	7076	12-1883	880	821 Baldwin	7218	3-1884
864	805 Baldwin	7078	12-1883	881	822 Baldwin	7227	3-1884
865	806 Baldwin	7109	1-1884	882	823 Baldwin	7232	3-1884
866	807 Baldwin	7113	1-1884	883	Baldwin	7240	3-1884
867	808 Baldwin	7141	1-1884		824 P & R* (a)		5-1899
868	Baldwin	7145	1-1884	884	825 Baldwin	7246	4-1884
	809 P & R* (a)		12-1898	885	826 Baldwin	7250	4-1884
869	810 Baldwin	7163	2-1884	886	827 Baldwin	7253	4-1884
870	811 Baldwin	7174	2-1884	887	Baldwin	7269	4-1884
871	Baldwin	7182	2-1884		828 P & R* (a)		10-1899
	812 P & R* (a)		10-1899	888	829 Baldwin	7271	4-1884
872	813 Baldwin	7183	2-1884	889	830 Baldwin	7284	4-1884
873	814 Baldwin	7185	2-1884	890	Baldwin	7287	4-1884
874	815 Baldwin	7188	2-1884		831 P & R* (a)		12-1898
875	816 Baldwin	7194	2-1884	891	832 Baldwin	7292	5-1884

First 862 was scrapped 4-1899 and replaced with

862	1020 Baldwin	17380	1-1900	2-8-0	22x28"	56"	165000
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892	Stag	P & R 2	2-1851	No data.	Wt. 32850	Sc. 3-1886
893	Gem	P & R*	1868	2-4-0	Wt. 24750	Sc. 9-1886

893	204	P & R	8-1886	4-4-0W	18½x22"	68½"	104500
893	205	P & R	9-1886	4-4-0W	18½x22"	68½"	104500

4-4-0W 18½x22" 61½" 160# 62900 93100 16650# T. E.
W 18½x22" 61½" 160# 66000 87000 16650 (rebuilt)

894	191 Baldwin	8008	6-1886	897	194 Baldwin	8018	7-1886
895	192 Baldwin	8009	6-1886	898	195 Baldwin	8024	7-1886
896	193 Baldwin	8015	7-1886	All rebuilt as above by P & R			

2-8-0	20x24"	50½"	120#	99500	114000	19390#	T. E.
(a)W	20x24"	50½"	145#	104500	120000	24235	
(b)W	20x24"	50½"	145#	105500	121700	24235	
(c)W	20x24"	50½"	145#	109000	125500	24235	
(d)	20x24"	50½"	150#	110160	124550	24240	
905	833	Baldwin	8011	6-1886	931	858	Baldwin 9118 3-1888(a)
906	834	Baldwin	8012	6-1886	932	859	Baldwin (a) 9131 3-1888
907	835	Baldwin	8016	7-1886	933	886	Baldwin (c) 9135 3-1888
908	836	Baldwin	8020	7-1886	934	887	Baldwin (c) 9379 7-1888
909	837	Baldwin	8025	7-1886	935	860	Baldwin (a) 9385 8-1888
910	838	Baldwin (a)	9003	1-1888	936	861	Baldwin (a) 9382 7-1888
911		Baldwin (a)	9004	1-1888	937	862	Baldwin (a) 9386 8-1888
	843	P & R (b)*		6-1899	938	863	Baldwin (a) 9420 8-1888
912	839	B L W (a)	8977	12-1887	939	864	Baldwin (a) 9421 8-1888
913	840	Baldwin (a)	8978	12-1887	940	865	Baldwin (a) 9422 8-1888
914	841	Baldwin (a)	8988	1-1888	941	866	Baldwin (a) 9425 8-1888
915	842	Baldwin (a)	8989	1-1888	942	867	Baldwin (a) 9426 8-1888
916	844	Baldwin (a)	9010	1-1888	943	868	Baldwin (a) 9429 8-1888
917	845	Baldwin (a)	9008	1-1888	944		Baldwin (d) 9423 8-1888
918	846	Baldwin (a)	9031	1-1888		869	P & R (b)* 9-1894
919	847	Baldwin (a)	9032	1-1888	945	870	B L W (d) 9424 8-1888
920	848	Baldwin (a)	9047	2-1888	946		B L W (d) 9430 8-1888
921	849	Baldwin (a)	9048	2-1888		871	P & R (b)* 2-1895
922	850	Baldwin (a)	9070	2-1888	947		B L W (d) 9439 8-1888
923	851	Baldwin (a)	9071	2-1888		872	P & R (b)* 7-1894
924	852	Baldwin (a)	9076	2-1888	948		B L W (d) 9444 8-1888
925	853	Baldwin (a)	9085	2-1888		873	P & R (b)* 5-1894
926		Baldwin (a)	9087	3-1888	949		B L W (d) 9446 8-1888
	884	P & R (b)*		—		874	P & R (b)* 9-1895
927	854	B L W (a)	9098	3-1888			
928	855	Baldwin (a)	9099	3-1888	950		B L W (d) 9464 9-1888
929	856	Baldwin (a)	9105	3-1888		875	P & R (b)* 1-1896
930	857	Baldwin (a)	9113	3-1888			

2-8-0	22x28"	50½"	140#	135000	150000	32200#	T. E.
W	22x28"	50½"	145#	131800	147300	33075#	T. E. (rebuild)
951	948	Baldwin	9294	6-1888	954	944	Baldwin 9309 6-1888
952	946	Baldwin	9295	6-1888	955	945	Baldwin 9352 7-1888
953	947	Baldwin	9307	6-1888	956	949	Baldwin 9351 7-1888

All rebuilt as above 1891-2.

4-4-0	19½x24"	67½"	160#	91300	122900	18400#	T. E.
(a)	19½x24"	67½"	160#	76350	108200	18400	
(b)W	19½x24"	68½"	160#	87000	124000	18120	
960	238	Baldwin	9166	4-1888	964	246	Baldwin 9177 4-1888
961	249	Baldwin	9167	4-1888	965	241	Baldwin 9191 4-1888
962	240	Baldwin	9168	4-1888	966	247	Baldwin 9323 6-1888
963	248	Baldwin	9173	4-1888			

The above engines were rebuilt by the Baldwin L. W. to (a) dimensions late in 1888 and again by the P & R to (b) dimensions from 1898-9.

4-4-0	19x24"	68½"	145#	84500	113500	15590#	T. E.
967	242	Baldwin	9250	5-1888	970	250	Baldwin 9254 5-1888
968	243	Baldwin	9251	5-1888	971	259	Baldwin 9255 5-1888
969	244	Baldwin	9252	5-1888	972	245	Baldwin 9258 5-1888

No. 970 was rebuilt with 77500# on drivers 113000# on engine.

No. 971W was rebuilt 19½x24" 68½" 160# 87000 124000 18120# T. E.

1001	W & DR #1	Baldwin		1872	No data.	Sc.	1-1898	
1001	P & R #433 (1)	Baldwin	3675	12-1874	4-4-0	14x24"	58"	67000
1002	W & DR #2	?			No data.	Sc.	8-1890	
1002	(33)	Baldwin	14916	6-1896	0-4-0	14x22"	44"	60000
1003	W & DR #3	P & R		1873		Sc.	1-1898	
1003	P & R #474 (3)	Baldwin	3507	11-1873	4-4-0	15x24"	58"	61600
1004	W & DR #4 (7)	Baldwin	7837	3-1886	4-4-0	18x22"	54"	?
1005	P & R #75	P & R		11-1862	4-4-0	Sc.	3-1891	
1006	P & R #495	Grant		9-1876	4-4-0	Sold—Poulterer & Co.		
				11-1898				
1007	P & R #179 (6)	P & R		7-1877	4-4-0	17x22"	68½"	75400
1008	P & R #365 (4)	P & R		6-1875	4-4-0	17x22"	61½"	73300
1009	P & R #313 (5)	P & R		3-1876	4-4-0	17x22"	68½"	75400
1010	P & R #472 (2)	Baldwin	3239	4-1873	4-4-0	14x24"	58"	67000

		4-4-0W	18½x22"	68½"	160#	69000	104700	14950#	T. E.		
1011	8	Baldwin	9977	5-1889		1013	10	Baldwin	9980	5-1889	
1012	9	Baldwin	9978	5-1889		1014	11	Baldwin	9981	5-1889	
		4-4-0W	21x22"	68½"	160#	73000	107000	19260#	T. E.		
1015	16	Baldwin	9986	5-1889		1018	19	Baldwin	10031	6-1889	
1016	17	Baldwin	9987	5-1889		1019	20	Baldwin	10001	5-1889	
1017	18	Baldwin	9997	5-1889		1020	21	Baldwin	10032	6-1889	

1021	P & R #331	P & R		10-1871	4-6-0	18x22"	48"	84000
	(31)	P & R*		4-1898	4-6-0	18x22"	48"	91000
1022	P & R #19 (32)	P & R		8-1874	4-6-0	18x24"	54"	89000
1023	P & R #186 (28)	Norris-Lanc.		1866	4-6-0	18x22"	48"	84000
1024	P & R #292	P & R		9-1870	4-6-0	18x22"	48"	84000
	(30)	P & R*		3-1899	4-6-0	18x22"	48"	91000
1025	P & R 232	Baldwin	1885	5-1869	4-6-0	18x22"	48"	84000
	(29)	P & R*		10-1897	4-6-0	18x22"	48"	97000

		4-4-2W	13&22x26"	84¼"	200#	81200	153800	14465#	T. E.		
1026	24	Baldwin	14739	3-1896		1028	26	Baldwin	15878	5-1898	
1027	25	Baldwin	14740	3-1896		1029	27	Baldwin	15879	5-1898	

		4-4-0	18½x22"	68½"	160#	69000	104700	14950#	T. E.		
1030	12	Baldwin	14006	5-1894		1032	14	Baldwin	14008	5-1894	
1031	13	Baldwin	14007	5-1894		1033	15	Baldwin	14009	5-1894	

The above came from the South Jersey R. R. and were numbered 4, 5, 6 and 7 respectively

		4-4-0W	21x22"	68½"	160#	73000	107000	19260#	T. E.		
1034	22	Baldwin	14013	5-1894		1035	23	Baldwin	14016	5-1894	

The above were South Jersey R. R. Nos. 8 and 9.

No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.
1050		No data — Sc.	8-1893				
1051	P & R #97	P & R	11-1863	4-6-0	18x22"	46"	68600
	(482)	P & R*	1-1893	4-6-0W	18x22"	48"	103000
1052	P & R #98	P & R	12-1863	4-6-0	18x22"	46"	78600
	(481)	P & R*	—	4-6-0W	18x22"	48"	103000
1053	(401)	P & R	1864	4-6-0	18x22"	48"	84000
1054	Sc. 9-1892	No data					
1055	P & R #150	P & R	4-1865	0-4-0	Sc. 4-1897		29000

No.	Name & 1900 #	Builder	Date	Type	Cyl.	Dr.	Wt.
1056	Sc. 8-1893	No data					
1057	Sc. 2-1895	No data					
1058	P & R #445(1238)	Baldwin	4449 10-1878	0-4-0	11x16"	36"	41000
1059	P & R #470(1239)	Baldwin	3115 1-1873	0-4-0	11x16"	36"	38000
1076	H & P #1 (111)	Baldwin	3639 9-1874	4-4-0	16x24"	58"	71000
1077	H & P #2	Sc.	5-1893				
1086	W. G. Case	R. Norris & Son		4-4-0	Sc. 5-1889		
1087	Lititz	H. B. & Co.	3-1865	?	Sc. 12-1897		
1087	P & R #31 (86)	P & R	1-1876	4-6-0	18x24"	54"	89000
1088	Robt. Crane (81)	?	—	4-4-0	17x22"	56"	65600
1089	Raleigh (83)	P & R	—	4-6-0	18x22"	48"	84000
1090	Ephrata (84)	Norris-Lanc.	1-1866	4-6-0	18x22"	46"	68600
		P & R*	—	4-6-0W	18x22"	48"	103000
1091	Columbia	P & R	1867	4-4-0	Sc. 3-1889		56700
1092	Oshkosh	Norris-Lanc.	8-1865	4-6-0	18x22"	48"	68600
		Sc.	12-1897				
1092	P & R #383 (82)	P & R	6-1873	4-4-0	17x22"	61½"	73300
1093	Lancaster (87)	P & R	1876	4-6-0	18x24"	54"	89000
		P & R*	—	4-6-0W	18x24"	54"	103400
1094	Union	No data			Sc. 7-1894		
1095	C. S. Malthy	?	(88) —	0-6-0W	16x18"	43"	61600
1096	P & R #28 (85)	P & R	5-1874	4-6-0	18x24"	54"	89000
1106	G & H #6 (89)	Rogers	3369 4-1883	4-4-0	18x24"	62"	90000
1107	G & H #7 (90)	Rogers	3471 5-1884	4-4-0	18x24"	62"	90000
1108	G & H #8 (91)	Baldwin	—	4-4-0	18x24"	62"	99000
1200	PP & B #1 (145)	Rogers	4112 2-1889	4-4-0	17x24"	62"	80000
1201	PP & B #2 (231)	Rogers	4119 3-1889	4-4-0	18x24"	62"	96200
		P & R*	11-1897	4-4-0W	18x24"	62"	107000
1202	PP & B #3 (232)	Rogers	4146 5-1889	4-4-0	18x24"	62"	96200
1203	PP & B #4 (233)	Rogers	4150 6-1889	4-4-0	18x24"	62"	96200
		P & R*	8-1899	4-4-0W	18x22"	62"	107000
1204	PP & B #5 (234)	Rogers	4161 7-1889	4-4-0	18x24"	62"	96200
		P & R*	4-1898	4-4-0W	18x22"	62"	107000
1205	PP & B #6 (235)	Rogers	4162 7-1889	4-4-0	18x24"	62"	96200
		P & R*	10-1898	4-4-0W	18x22"	62"	107000
1206	PP & B #7 (236)	Rogers	4163 7-1889	4-4-0	18x24"	62"	96200
1207	PP & B #8 (237)	Rogers	4220 11-1889	4-4-0	18x24"	62"	96200
		P & R*	4-1899	4-4-0W	18x22"	62"	107000
1208	PP&B # 9 (1454)	Rogers	4221 11-1889	2-6-0	19x24"	54"	110000
1209	PP&B #10 (1455)	Rogers	4222 11-1889	2-6-0	19x24"	54"	110000
1210	PP&B #11 (1456)	Rogers	4287 5-1890	2-6-0	19x24"	54"	110000
1211	PP&B #12 (1457)	Rogers	4288 5-1890	2-6-0	19x24"	54"	110000
1212	PP&B #13 (1458)	BLW	11089 8-1890	2-6-0	19x26"	54"	110600
1213	PP&B #14 (1459)	BLW	11093 8-1890	2-6-0	19x26"	54"	110600

Observation or Inspection Engines—Not Numbered in 12-1871

Witch		P & R*	1868	2-2-2	8x8"	45"	24075
		P & R*	—	Sold—P&RC&I			Co. 4-1900
Transit	(102)	P & R	7-1867	2-2-2	8x8"	45"	21375
Ariel		P & R	8-1856	? ? ?	18675	Re	Alpha
Ariel	(103)	P & R*	1-1872	2-2-2	8x8"	45"	21375
Gem		P & R*	1868	2-4-0	?	?	24750
	Numbered 893, 1884	Sc.	9-1886				
Stag		P & R	2-1851	?	?	?	33050
	Numbered 892, 1884	Sc.	3-1886				
Black Diamond		Baldwin	10174 8-1889	2-2-2	8x8"	45"	?

Alpha—formerly first "Ariel"—renamed 12-1871, Sc. 1879

The "Gem" came from and carried the same name on the Mine Hill R. R.
W—Wide firebox locomotive.

READING LOCOMOTIVES

1900-1944

Coming now to the third period of the Philadelphia and Reading history, it is debatable which of the three has contributed the most to the development of that machine. The first produced mainly by trial and error, the engine itself, and the successful burning of coal with the firebox raised above the engine bed.

The second era contributed the "culm" burning firebox, the heavy freight locomotive and the high speed Atlantics. The work of the third period has been to continue to improve to new standards of efficiency the work begun in the first two, and to keep abreast of the increasing demand, not for tractive power alone, but for sustained horsepower and economical operation. New types have been designed, mechanisms have been improved, and an infinite number of devices have been added until the present day locomotive is a veritable power plant on wheels.

One of the first of the new classes of this group was one peculiar to the Reading. This was the A-4-a class and its successors in classes A-4-b and A-5-a. All were of the 0-4-0 type, with wide fireboxes and center cabs. The A-5-a class, with tractive power of 24,456 pounds and adhesive factor of 4.51 (that of the A-4-b is 5.01) is especially well adapted to work about wharves and in industrial plants, where short radius curves require the short rigid wheel base of a four wheel engine. These were the successors to the "go-devils," an 0-4-0 saddle tank engine, long used successfully by the Reading for similar work. The A-4-a class was originally equipped with 4-wheel "swallow-tail" tenders, carrying both coal and water, and which were later replaced with an eight wheel tender.

The switching classes also include 0-6-0 and 0-8-0 types. The five locomotives of the B-6-a class, built in 1903, were the only soft coal burning switchers with narrow fireboxes. The other 0-6-0's were built with modified Wootten boilers. Those of the B-8 class possess the unique feature of having fireboxes whose width, 9'-0", is greater than their length of 7'. These engines were designed as successors to the A-5-a class, in "short curve" service, and had a rigid wheel base of 9', only two feet greater than that of the A-5's, and develop a tractive power of 37,150 pounds.

The eight wheel switchers were supplemented by class E-4-a, consisting of 26 locomotives of the former I-4-d class, from which the pony truck was removed, to convert them from road engines to switchers. They were then renumbered 1410 to 1437 (except 1430 and 1435). By the conversion, years were added to the service of these engines outmoded for road work. The class E-5-s-a, #1490-1499, first built in 1924, representing the highest development, of the eight wheel switcher on the Reading.

In 1914, a change in design was inaugurated, which was to alter the long familiar appearance of Reading motive power by placing the

cabs of wide firebox engines behind the firebox instead of ahead of it. The constantly increasing size of boilers; together with clearance limitations, necessitated this change, and it was accomplished by lengthening the frames and literally hanging the cab on the rear end of the firebox. Prior to this time, there had been much agitation against the centrally located cab, separating, as it did, the engineer and fireman. However, the increased size of boilers spelled the doom of the middle cab, rather than legislation or direction from the Interstate Commerce Commission.

Other than #1700, Class M-1-a, the first end cab locomotives with wide fireboxes in recent years, were those of Class D-11s, built by Baldwin in 1914, and nick-named "Bull-Moosers." They were probably the most powerful American type locomotives to be constructed, and represent its highest development. Although having drivers 68½ inches in diameter, it was originally planned to equip the D-11's with 80 inch wheels.

Going back a few years, the increasing number of locomotives on the road required facilities for repair greater than the company possessed and in 1900, construction of the present locomotive shops in Reading was begun. They were finished at a cost of over \$1,700,000 and have since been adequate to take care of repair work for the entire system, to convert and rebuild the road's power and to continue to build many of the current locomotives.

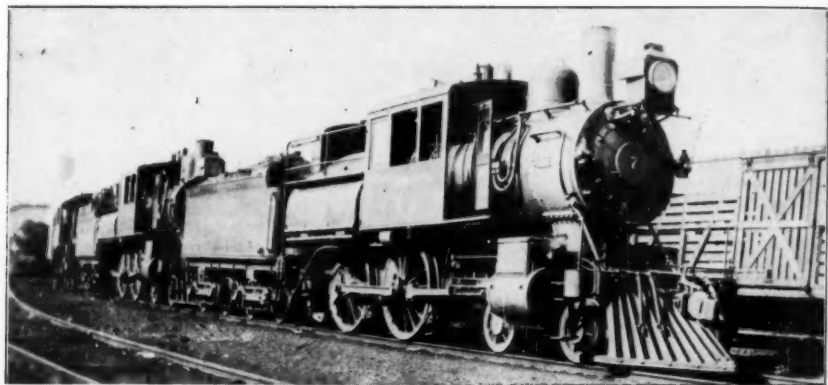
To improve motive power, it has been necessary to modernize existing power with such improvements as piston valve cylinders, outside valve motion, superheaters and, in several instances, to build practically new locomotives from those whose original design had become obsolete. To perform these functions of maintenance, conversion, and construction has been possible only because of the excellence of the shop facilities at Reading.

The American type, which reached its most advanced design in the Class D-11s, as mentioned above, was also favorably represented by the locomotives of the following classes: D-5-f, D-5-h, D-8-b, D-8-c and the D-9 classes. There were 35 locomotives of the first two classes, which were rugged, compact machines used in heavy suburban and short express runs. The D-8-b and c were further developments of these engines, while the D-9's were mostly early D-5 class rebuilt with 78 inch drivers (D-9-e had 74 inch wheels) and were principally used on the Atlantic City Division, where absence of grades permitted the use of high wheels.

Although the passing of the eight wheeler was directly due to the electrification of the Philadelphia area, the type had reached the limit of its possibilities and was, at that time, being replaced by ten-wheelers, of which more will be said later.

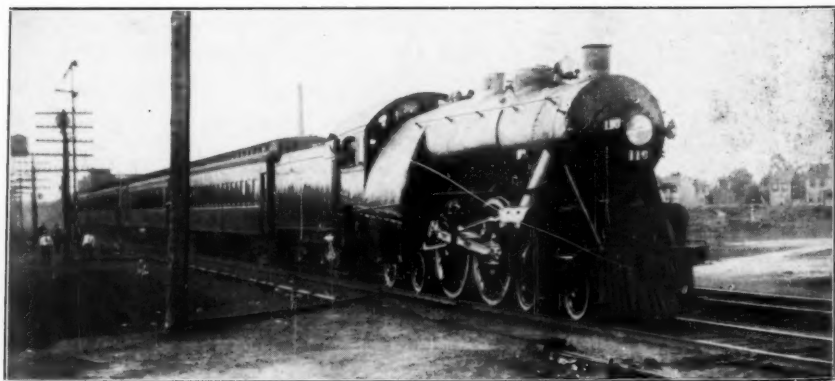
The Atlantic type, which had been so successfully used at the close of the 19th Century, predominated the fast passenger service even after the advent of the Pacific type in 1916. The oldest 4-4-2's, all with Vaclain Compound cylinders and 84¼ inch drivers, were equipped with wide fireboxes and center cabs. As stated before, the era of the compound cylinders was not a long one, and many of the Atlantics in 1903 had simple cylinders.

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—Courtesy of C. E. Fisher.

P. & R. #7, D-11, Reb. P. & R. 1903, at Camden, N. J.



—Courtesy of W. R. Osborne.

P. & R. #110—C-1a, Reading Shops, 1915.

Among the largest and finest center cab Atlantics were the classes P-5a and b locomotives, built at Reading Shops in 1906. Mr. Edward O. Elliott, at one time Chief Draughtsman for the road was largely responsible for their design in addition to some other well known classes. These locomotives had 86 inch drivers, which at the present time (12-1944), with three so equipped, represent the largest used on locomotives in this country.

Many of the Class P were modernized with outside valve gear and many with $84\frac{1}{4}$ inch wheels were replaced with 80 inch wheels. The Class P-5 locomotives #340 to 349, were rebuilt in various ways, which included smaller drivers and different size cylinders. Superheaters, piston valves and Walschaert Valve gear were included in the changes. #344 was rebuilt with three cylinders, in May, 1912, the first Reading locomotive with a Schmidt superheater. She was rebuilt with two cylinders in 1917.

Two other three-cylinder Atlantics, #300 and #303, were built new at Reading, in 1911 and 1909 respectively, under the direction of Howard D. Taylor, S. M. P. & R. E. and Edward O. Elliott, who worked upon the designs. The outside valves of all three cylinder locomotives were actuated by Walschaert Valve gear and the inside valve by the Joy gear. Both were controlled by a common reverse lever. A detailed account of these locomotives appeared in Paul T. Warner's article on the three cylinder locomotives in Bulletin #58. As experienced with so many other three cylinder engines used in high speed service, trouble developed in the crank axle and engines of this type were rebuilt with two cylinders in 1916 and 1917. They are credited by Paul T. Warner with being "among the most successful three cylinder locomotives ever used in this country and were outstanding examples of excellent design and fine workmanship."

The last of the Reading's Atlantics were Classified P-7-a, which, although built with the 4-4-4 wheel arrangement, were rebuilt as 4-4-2's. The 4-4-4 or Reading type, Class C-1-a, of which there were four built at Reading Shops in 1915, were numbered 110 to 113. They possessed many unique features. The principal weakness in their design was the use of four point suspension, instead of the customary three point. The use of the four-wheel trailing truck, in view of its successful performance and widespread adoption in later years, was perhaps the most interesting of the innovations employed. The riding qualities of this class were not satisfactory, and it was decided to convert the engines to Atlantics and to revert to the three point suspension. The wheel-operated cable reverse gear was replaced with the conventional power gear. Other changes made in the rebuilding, included reduction of the grate area from 108 square feet to 94.5 square feet, and the reduction of boiler pressure from 240 to 215 pounds. They were renumbered 350-353.

In reviewing the locomotives of the 4-4-2 wheel arrangement, mention should be made of an inspection engine, #100, of this type, which is most unusual for this class of service. Generally speaking, inspection engines had been rebuilt versions of obsolete 4-4-0's or built new with that wheel arrangement, but #100 was built at Reading in 1913. With

a tractive force of 19,300 pounds, it was capable of handling considerably greater tonnage than was customary for an inspection engine. It was withdrawn from service in April, 1929, due to a combination of circumstances which ended the careers of official engines on practically all railroads.

When it became apparent that the power required to handle the heavy passenger trains, especially the Baltimore and Ohio's running the Reading tracks between Philadelphia and Jersey City, was beyond the limitations of the Class P engines, the chosen successor was the Pacific type. The first on the Philadelphia and Reading, #105, was built at Reading in 1916, and designated class G-1a. This was the second type assigned to Class G, the first having been 0-10-0 switchers of which there were but two.

The Pacifics are all equipped with wide fireboxes and end cabs, and have 80 inch driving wheels, except five in Class G-1-s-b which have 74 inch wheels. As a whole, the Class G engines possess the traditional appearance of the more recent Reading passenger engines. Several have since been semi-streamlined (#108 and #178) and #117 and #118 fully streamlined for service on the "Crusader," between Philadelphia and New York.

That the record of this class has been most satisfactory is made evident by the fact that, after twenty-seven years, they have not been superseded and continue to meet the schedules of the Atlantics with trains of greatly increased weight.

The 4-4-0 type was first used on the road in 1840. The first 4-6-0 was placed in service in 1847. From those years until well into this century these two types may well be called the backbone of Reading motive power, in spite of the fact that the ten-wheeler was replaced in "drag" freight service by the Consolidation type in 1880. The *Gunboats*, most of which became class F and the first of the class L engines, especially the latter, assumed the task of handling the fast freight schedules, for which there was a newly created demand. The ten-wheelers were progressively developed through the L-3, L-4, and L-5 classes, the L-5-a's being fast and powerful and excellently suited for the fast freight service for which they were designed. For the same service, Class L-7-a, were the heaviest and most powerful.

The time came when engines of Classes L-5 and L-7 were too light for fast freight service. The former, together with many other L engines, both lump coal and soft coal burners, were changed with new wide fireboxes, given superheaters, and Walschaert Valve gear. They were at the same time assigned to local passenger trains. The engines of class L-7-a were modernized and also placed in passenger service.

There are three other locomotives of the ten-wheel type that are of special interest. The first of these, #616, was rebuilt from #603, Class L-7-s-b, equipped with Caprotti valves, and her cab relocated back of the firebox and reclassified L-6-s-a. This was done in 1930. A Santa Fe type, #3010, was also equipped with Caprotti Valves, and if the use of high pressure steam and large cylinder continues as is indicated by present trends, the use of Caprotti or some other type of poppet valve will be desirable.

Probably the most prominent of the Reading ten-wheelers in recent years were #675 and #676, built at Reading in 1911. Both were center cab, wide firebox engines, the former having three cylinders, the latter having two. #675 was similar in many respects to the three cylinder Atlantics, especially in excellence of workmanship and appearance. In 1916, #675 was rebuilt with two cylinders. Both engines were used in passenger service and #675 made some remarkable speed runs on the Atlantic City Railroad.

Beginning in 1903 the Reading purchased ten locomotives for short haul suburban service. These were classified Q-1, 2-6-4T type, #376 to 385, and were chiefly used on the Norristown and Chestnut Hill Branches until electrification in 1931.

Turning to the freight locomotives, that class is predominated by the Consolidation type, of which there have been approximately 800 since that type was introduced on the road in 1880.

The Vauclain compound "culm" burners of the early 1890's were followed by the soft coal burners just at the close of the 19th century. In 1905, however, the company reverted to the use of the wide firebox in ordering sixty-five locomotives, Class I-8-a, from Baldwin's, and in the other I-8 classes built at Reading, in the years 1910 to 1914. These were followed by Class I-9a, in 1918 and I-10-s-a in 1923 to 1926. In the latter group, a tractive power of 71,000 pounds is attained, as compared with 19,390 pounds of the original Consolidations.

In a group as large as the Consolidation classes of the Reading, it was inevitable that there should have been numerous conversions, which was indeed the case. As related in discussing the 1871-1900 group locomotives, the lump coal Consolidations of 1888 were subsequently rebuilt with standard fireboxes only a short time later. The Compounds were changed to simple engines shortly after 1900. During the next few years, a considerable number of the I-1 classes were changed to soft coal burners, chiefly for switching service, in the I-3-a class. Others, retaining their Wootten fireboxes had sloping crown and roof sheets replaced with horizontal ones, a conversion which took place in many of the first Wootten boilers of all classes of engines.

A start was made to convert the I-7 engines with wide fireboxes. Only six were so changed. They were renumbered 1101 to 1103 and #1108 to 1110, although they retained their original numbers for a short time after the conversion. The first three were placed in Class I-6-a, the second time this class symbol has been used. The first engine assigned to this class has earlier been simplified and reclassified I-5-c. The second class I-6-a were almost duplicated by an order for fifteen from Baldwins in 1907—#1111 to 1125, Class I-6-c.

Other I-7 engines were given cylinders 1 inch smaller in diameter and driving wheels were reduced to 55½ inches, probably for the sake of standardization. When so changed they were reclassified as follows: I-7-a, b, c, and d became I-7-j, k, l, and m, respectively.

The I-8-a locomotives were, generally speaking, modernized with piston valve cylinders and Walschaert Valve gear, and some were equipped with superheaters. There were nine to which 55½ inch driving wheels were applied.

Two locomotives, #1616 and 1617, originally I-8-e, were built new with Jacobs-Shupert fireboxes, of patented construction, whose principal feature was the absence of radial staybolts. These fireboxes were also applied to #1466 to 1470 0-6-0 class B-9-b. The I-8's were subsequently replaced by the standard firebox and reclassified I-8-s-d. As originally built, the center cabs of these engines, (I-8) were set forward further than on other engines, due to the extreme length of the firebox, and the steam dome was thereby placed in the cab. The location of the cab was not altered when the standard fireboxes were applied.

At the present time (1944) #1581 alone continues as originally built in Class I-8-a, and all of the I-9 and I-10 classes are in their original form.

There have been four other wheel arrangements used in heavy freight service, but not to the same extent as the Consolidations. Those types include the Mikado, Decapod, Santa Fe, and Mallets of the 2-8-8-2 type.

The first Reading Mikado, class M-1-a, #1700, was built at Reading Shops in 1912. There are fifty-seven in service; the M-1-s-a having 61½ inch drivers, and the former class M-1-s-b having 55½ inch drivers, but all of these have been converted to M-1-s-a.

Little mention need be made of the Decapods, of Class J. There were only four and they were part of the order built originally for the Russian Government, during World War I. The collapse of the Czarist regime found the locomotive builders with a number of these engines completed and no responsible Russian Government to accept them. They were sold to various American railroads after the close of the United States Railroad Administration in 1920, the Reading buying four that they numbered 1126 to 1129. They were scrapped in March, 1935.

During the years immediately before the first World War, the Mallet Compound achieved its greatest popularity in this country. They presented apparently unlimited possibilities for sheer hauling capacity, but compared to their successors, the simple, four cylinder articulated locomotives, they were the experiment that disproved the theory that brute strength alone was required to operate freight trains. They nevertheless, move considerable tonnage today.

The Mallets were essentially pushers on the Reading, and it was for this service that a majority of them were built. During the years 1917 to 1919, 31 Mallets of the 2-8-8-2 type were purchased from Baldwin's, and as far as Mallets are concerned, they represented the best practice of their day, although their appearance was not in keeping with Reading standards.

Eleven of this class, #1800-1810, were rebuilt at the Reading Shops between 1927 and 1930, into the Santa Fe type, Class K-1-s-a, and were renumbered 3000-3010, but not in respective order. That this conversion was satisfactory is supported by the fact that ten additional locomotives, Class K-1-s-b, practically duplicates of the first eleven, were purchased from Baldwin's in 1931.

The remaining Mallets, 1811-1830, are being converted to single expansion, articulated locomotives at the Reading Shops. The first of the converted Mallets retained their original wheel arrangement and were classified N-1-s-d. In recent years the trailing truck was removed from the others as they were converted and from those already changed; the wheel arrangement thus becoming 2-8-8-0 and the class designation remaining the same.

It should be noted that the use of lump or prepared anthracite, and "culm," for fuel, declined during and after World War I. In the 1920's and 1930's a mixture of anthracite and bituminous was the rule for use in many locomotives, both passenger and freight. To date, during World War II, the percentage of anthracite has been reduced and there are a number of locomotives using 100% bituminous for fuel.

Inasmuch as this article essays to cover all of the motive power of the Reading, it must necessarily include the Diesel locomotives, which, although not in the category of the steam locomotive, are definitely an important factor in the motive power equipment.

Up to this time, (12-31-1944), Diesels have been used only for yard service on the Reading, but their performance in freight and passenger traffic on other roads has removed them from the class of "fads" or experiments, and their eventual use on the Reading for pulling freight and passenger trains is very much of a possibility.

There are now 34 Diesels in service on the Reading. All are of the 0-4-4-0 type and their ratings vary from 300 to 1000 H. P. #98 and 99, received as #50 and 51, in June, 1926, and March, 1928, respectively, were the second and third engines of this variety placed in service in this country. From the roster will be seen that the products of a number of builders are being given trial, not unlike the early days of the steam locomotive, when the many builders were striving to prove the elaborate claims of the superiority of their own engines.

Mention should also be made of Budd oil-electric Car, No. 65, for short line passenger service, placed in operation in November, 1932. This "vehicle" had many improved features, the most notable of which was steel flanged wheels with rubber treads.

On branch lines, where passenger service has dwindled to a point where it is not feasible to operate steam trains, the service was augmented by the use of oil-electric and gas-electric coaches, first placed in service in August, 1925. Fifteen cars of this type were purchased and placed in operation between 1925 and May, 1930, in addition to the Budd Car referred to above. These cars bore numbers 66 to 80, inclusive.

The Philadelphia suburban area, now almost entirely electrified, is served by 120 MU electric cars, each equipped with two 250 H. P. motors and drawing current of 12,000 volts through pantagraph trolleys. In making this installation to replace steam operated trains, there were some innovations adopted which were radical departures from existing electrical railroad operating practice, all of which have proved to be sound engineering principles and worthy of fuller description than space here permits. The equipment is, after thirteen years of service,

giving satisfaction and has shown itself to be motive power of the company's standard.

**Locomotives Built (new) at Reading Shops, Reading, Pa.,
From April 1, 1900 to December 31, 1944***

1900— 0	1913—18
1901— 0	1914— 2
1902— 0	1915— 4
1903— 0	1916— 6
1904— 0	1917—17
1905— 0	1918—13
1906—22	1919— 0
1907—37	1920— 0
1908— 1	1921—10
1909—21	1922— 0
1910—42	1923— 5
1911—25	
1912—29	None Thereafter to date.

Total—252 locomotives

* Does not include six locomotives built for the C. R. R. of N. J.

The 1900 Classification System

The classification in use today was adopted at the time of the re-numbering, in April, 1900. Prior to that time, the system in use employed a letter denoting the general type of an engine, followed by a number indicating the subdivision of that class.

The new system is basically the same in that a letter or letters are assigned to each type or wheel arrangement. This letter is followed by, first, a number indicating the subdivision of the general class, and second, by a letter which indicates a slight variation in the sub-classes. On locomotives equipped with superheaters, the letter "s" is inserted before the final letter of class designation. This phase of the system was not adopted immediately upon the first use of superheaters, hence a number of locomotives so equipped had the "s" added to their class designation at a later date.

The classes of the 1900 system were designated as follows:

A	0-4-0	K	4-4-0
B	0-6-0	L	4-6-0
C	4-4-0	M	2-4-2
D	4-4-0	N	2-6-0
E	0-8-0	O	none
F	4-6-0	P	4-4-2
G	0-10-0	Q	2-6-4
H	4-6-0		tank
I	2-8-0	OE	Diesel electrics
J	2-10-0		(assigned 1926)

In later years, engines in classes C, G, K, M and N were all disposed of, and these class letters were re-assigned as follows:

C	4-4-4
G	4-6-2
K	2-10-2
M	2-8-2
N	2-8-8-2 (and 2-8-8-0)

That the road's engines were readily adaptable to the classification was no mere co-incidence, but indicates that the advantages of standardization were recognized at an early date and had been practiced for many years prior to the adoption of the present classification system.

This system, as originally designed, has been sufficiently elastic to meet every condition, but has not been as rigidly adhered to as its originators may have planned. There have been several duplications of class designation, other than the re-assignment of class letters. For example, class L-6a has been used on two engines, bearing little similarity to each other beyond wheel arrangement. The same is true of the I-6-a and P-2-a classes. The second use of the class designation was not used, however, until some time after the first had been discontinued.

Another irregularity involved the old I-53 class, engines Nos. 933 and 934. These two locomotives were renumbered 886 and 887, class I-3-a, in April, 1900, and were shortly thereafter reclassified I-2-d, to make room for the first of the I-1 class that were rebuilt into the present

I-3-a class. This was a most peculiar inconsistency, for the other I-2's were all "camel-backs" and the rebuilt I-3-a engines had end cabs, similar to the I-2-d reclassified.

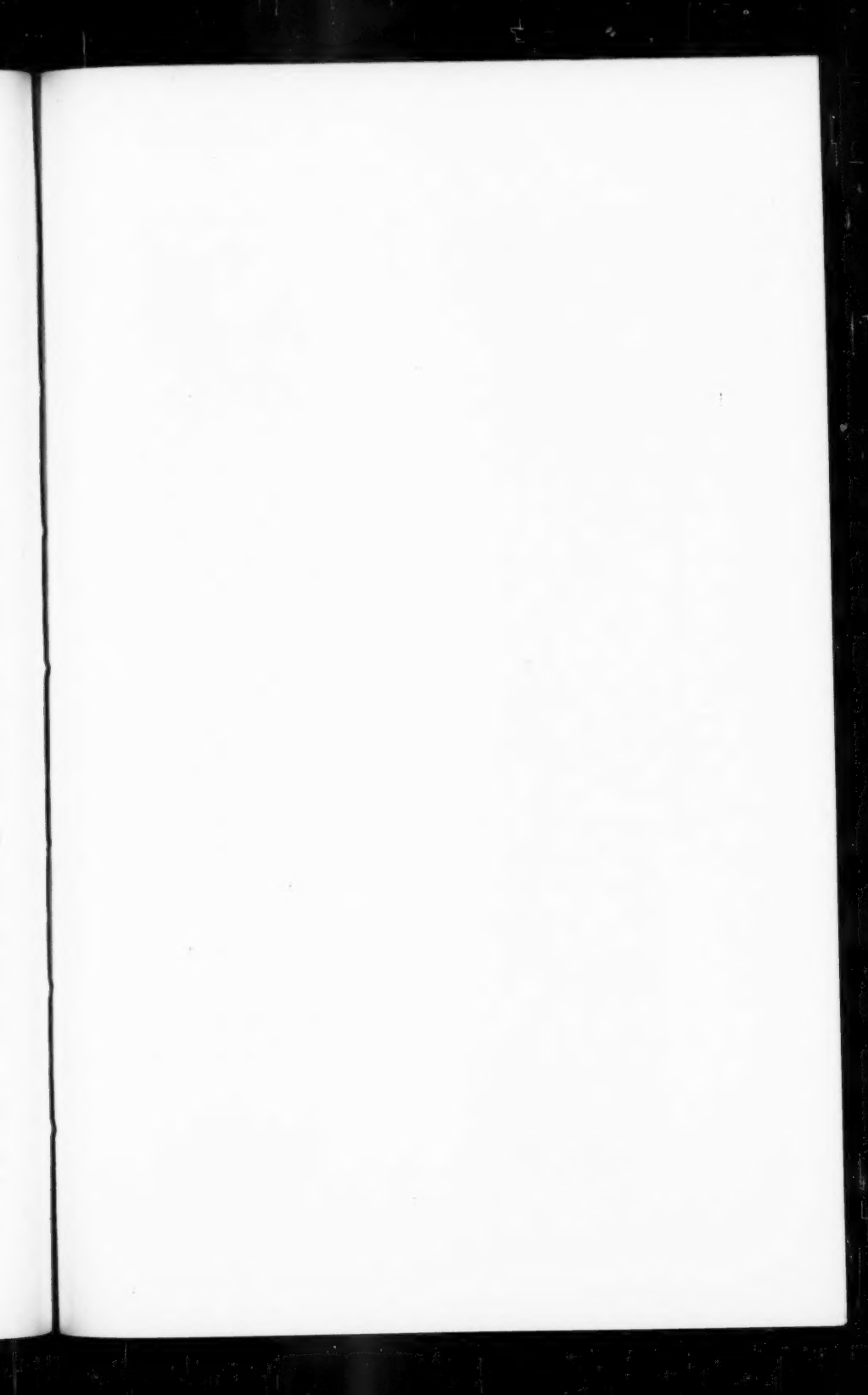
Another unusual class change was made with #1203, originally classified A-2-b. Until this locomotive was placed on the unclassified list, #1204 to 1233 were classified A-2-a, although there was a variation of weight and boiler pressure and builders within the group. These differences were taken care of first: by changing #1203 from Class A-2-b to unclassified; second, #1204 to 1215, built at Reading Shops, kept their original classification A-2-a; third, #1216 to 1230, built by Baldwin carrying 145 pounds steam pressure and slightly heavier, were classified A-2-b; fourth, #1231 to 1233, built by Baldwin in 1896, were given a new class—A-2-c. It is not known why this group was not properly classified in the first place, but this appears to be the way they were re-classified after the system of 1900 had gone into effect.

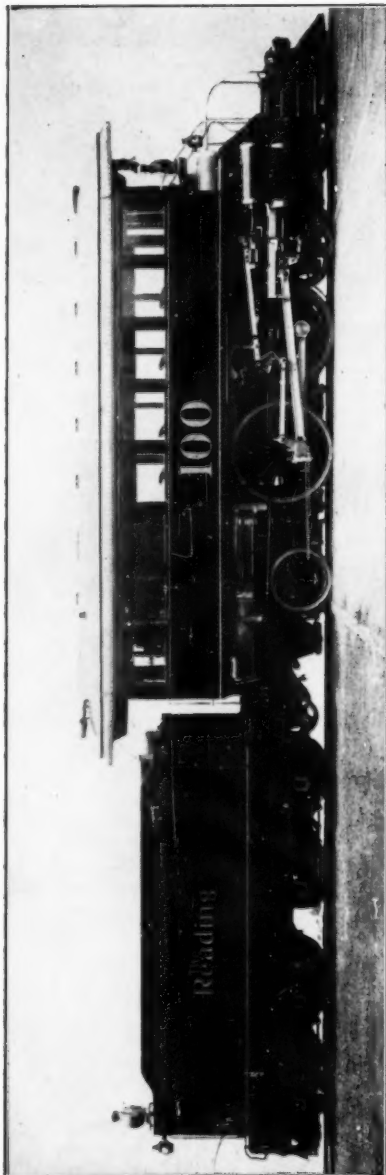
Originally #1252 to 1263 were classified B-1-a and #1264 B-1-b. Although there was no apparent difference in the boilers of #1252 to 1263, there were differences in weight chiefly because the frame near the cab and firebox was three feet shorter on #1254 to 1256, 1258, and 1263. After 1900 the following changes of classification were made within this group: #1264 reclassified B-1-b to B-2-d; #1254 to 1256, 1258, and 1263 reclassified from B-1-a to B-1-b, and the others keeping their original B-1-a classification.

A more recent digression is seen in the assignment of class N-1-sd to the rebuilt articulated engines, from which the trailing wheels were removed when the engines were simplified. The trailers were not removed from the first engines converted, so that class N-1-sd covers both 2-8-8-0 and 2-8-8-2 types. It is possible that, at some future date, the trailers will be removed from the first of the N-1-sd engines and all of this class will be of one type. Even in this event, the present class N will cover two different wheel arrangements.

In referring to the classification, the difference between sub-divisions is not always readily apparent. The presence or absence of a combustion chamber would affect classification. The difference may be due to type of boiler, viz., wagon top or straight top; or to type of firebox roof and crown sheets, either horizontal or sloping. Furthermore, a very evident difference, the use of another type valve gear, does not always cause a change in classification. In later years, cylinders and driving wheels of dimensions differing from those of a class standard have been applied to some engines in a class group, without any change of class. Such procedure is no doubt perfectly satisfactory to the company, but it does not seem to be consistent with the intent of those who devised such a simple and efficient classification schedule.

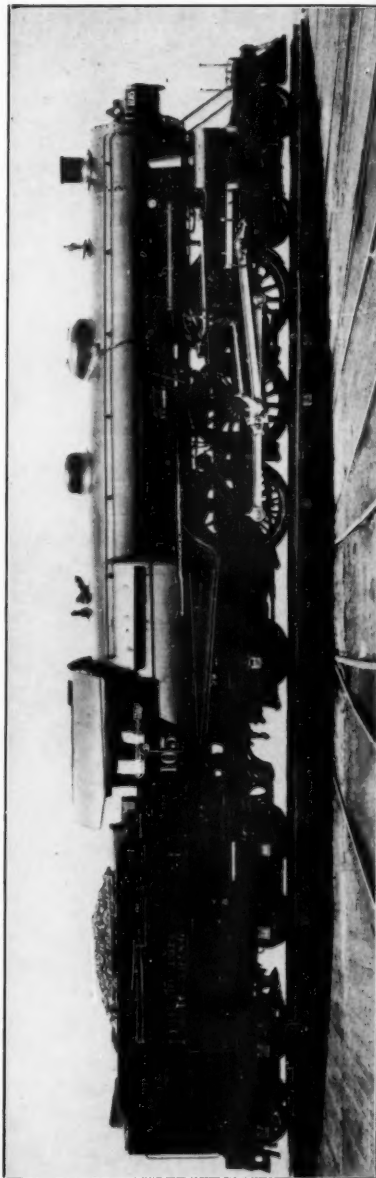
There will appear variations between this record and official records, unless the latter are of a date contemporary with this data, which, insofar as possible, shows the locomotive data as they were at the time of classification in 1900, or, in the case of engines built or rebuilt thereafter, at the time of building or re-building, as the case may be. A reduction in boiler pressure, usually due to an engine's advancing age, would naturally be reflected in the tractive power rating.





—Courtesy of the Reading Co.

P. & R. #100—Reading Shops, 1913.



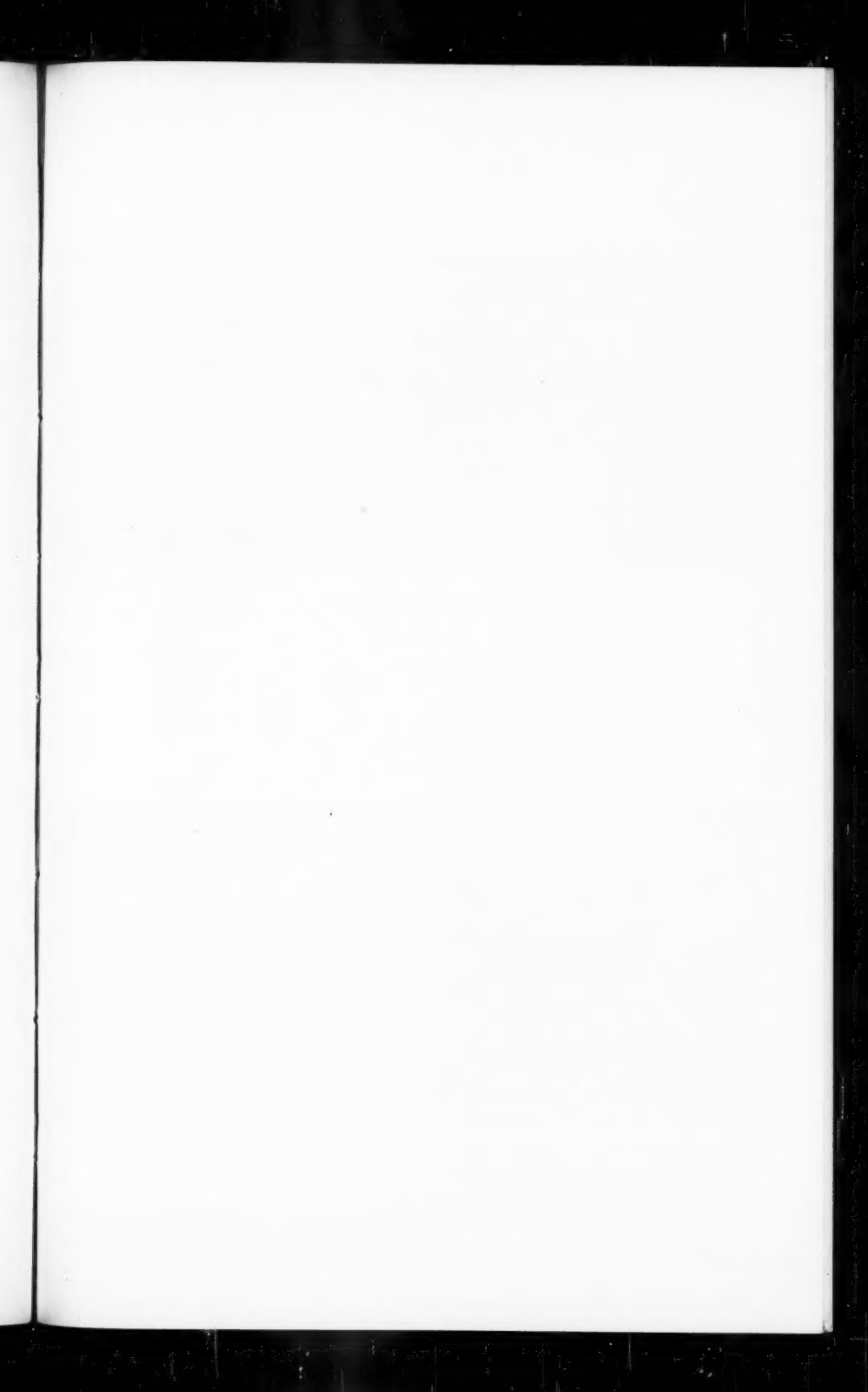
—Courtesy of the Reading Co.

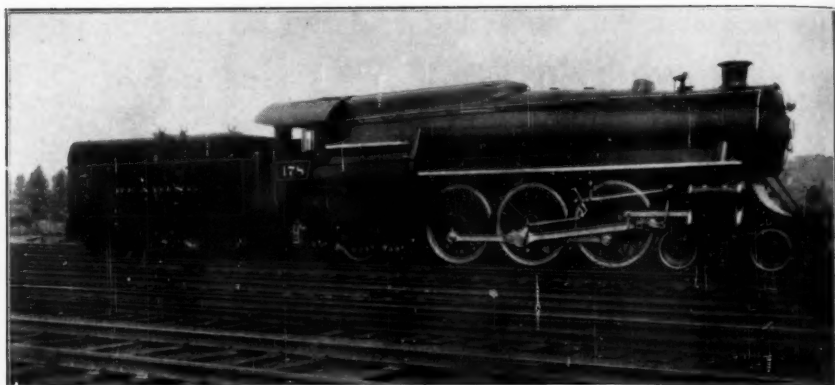
P. & R. #105, G-11e—Reading Shops, 1916.

Locomotives—1900-1944

So far as possible, the locomotives will be grouped according to class, replacements of the original numbers will follow in their own group.

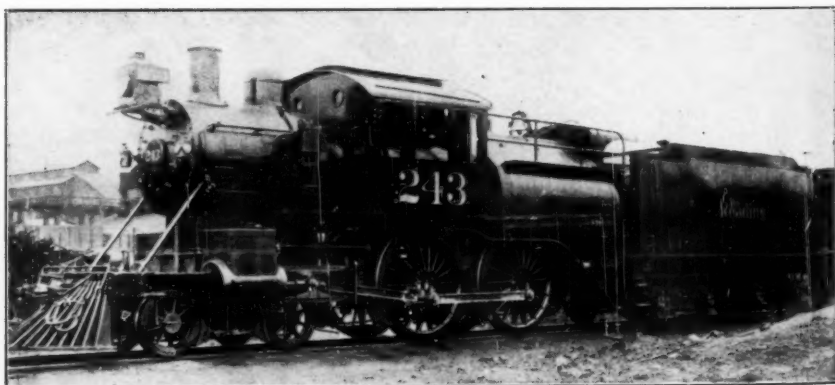
4-4-0									
	C-1a	14x24"	58"	120#	44000	67000			
	C-2a	15x24"	58"	120#	44600	61600	9495#	T. E.	
	C-5a	17x22"	61½"	120#	44000	73300	10545#		
	C-6a	17x22"	68½"	120#	44600	75400	9680#		
	Uncl.	18x24"	57"	130#	?	?	?		
1	1001	C-1a	Baldwin	3675	12-1874	Sc.	6-1901		
2	1010	C-1a	Baldwin	3239	4-1873		4-1902		
3	1003	C-2a	Baldwin	3507	11-1873		2-1902		
4	1008	C-5a	P & R		6-1875		5-1910		
5	1009	C-6a	P & R		3-1876	Sold—Poulterer & Co.	8-1902		
6	1007	C-6a	P & R		7-1877	Sold—Poulterer & Co.	8-1902		
7	1004	Uncl.	Baldwin	7837	3-1886	Reb D-li P & R	6-1903		
				18x22"	61½"				
	D-3k	18½x22"	61½"	160#		73850	108550	16650#	
	D-4g	18½x22"	68½"	160#		69000	104700	14950#	
	D-5b	21x22"	68½"	160#		73000	107000	19260#	
	D-9b	21x22"	78"	175#		84700	128200	18502#	
	D-9c	21x22"	78"	200#		?	?	21145#	
	D-9d	21x22"	78"	185#		88300	135400	19560#	
	D-9e	21x22"	74"	200#		96050	142475	22290#	
	D-5c	21x22"	68½"	160#		73000	107000	19260#	
All wide firebox									
7	1004	D-3k	P & R*		10-1906	Sc.	7-1920	P & R #7 D-li(W)re.	
8	1011	D-4g(W)	Baldwin	9977	5-1889		11-1914		
9	1012	D-4g	Baldwin	9978	5-1889		3-1914		
10	1013	D-4g	Baldwin	9980	5-1889		9-1914		
11	1014	D-4g	Baldwin	9981	5-1889		3-1915		
12	1030	D-4g	Baldwin	14006	5-1894		9-1915		
13	1031	D-4g	Baldwin	14007	5-1894		4-1914		
14	1032	D-4g	Baldwin	14008	5-1894		5-1923		
15	1033	D-4g	Baldwin	14009	5-1894		1-1915		
16	1015	D-5b(W)	Baldwin	9986	5-1889	P&R*	1903	D-9b	
						P&R*	1918	D-9d	Sc. 8-1923
17	1016	D-5b	Baldwin	9987	5-1889	P&R*	1903	D-9b	Ret. 12-1912
18	1017	D-5b	Baldwin	9997	5-1889	P&R*	1903	D-9b,c	
						P&R*	1907	D-9d	Sc. 9-1928
19	1018	D-5b	Baldwin	10031	6-1889	P&R*	1903	D-9b	
						P&R*	1913	D-9e	Sc. 11-1927
20	1019	D-5b	Baldwin	10001	5-1889	P&R*	4-1903	D-9b	
						P&R*	5-1913	D-9e	Sc. 2-1928
21	1020	D-5b	Baldwin	10032	6-1889	P&R*	3-1903	D-9b	
						P&R*	4-1913	D-9e	Sc. 5-1928
22	1034	D-5c(W)	Baldwin	14013	5-1894	P&R*	5-1903	D-9b	
						P&R*	2-1914	D-9e	Sc. 5-1928
23	1035	D-5c	Baldwin	14016	5-1894	P&R*	?	D-9b	
						P&R*	3-1914	D-9e	Sc. 8-1927
4-4-2									
	P-1a	13&22x26"	84¼"	200#		81200	153800	14465#	
	P-1b	13&22x26"	84¼"	200#		81200	153800	14465#	
	P-1d	20x26"	84¼"	200#		?	?		
	P-1e	20x26"	84¼"	200#		93200	166600	20985#	
All wide firebox									
24	1026	P-1a	Baldwin	14739	3-1896	P&R*	6-1903	P-1b	Sc. 3-1928
25	1027	P-1a	Baldwin	14740	3-1896	P&R	?	P-1d	14465#
						P&R	4-1904	P-1e	Sc. 4-1927
26	1028	P-1b	Baldwin	15878	4-1898	P&R	5-1904	P-1e	Sc. 11-1928
27	1029	P-1b	Baldwin	15879	4-1898	P&R	4-1903	Renumbered	
29		P-1e				Sc.	2-1927		





—Courtesy of the Reading Co.

Reading #178—G-2sa, Baldwin, 1926.



Reading #243—D-8b, Reading Shops, 1907.

Nos. 1-9 vacant.

Class OE-3

10 E. M. C. 1937	12 E. M. C. 1937	14 E. M. C. 1937
11 E. M. C. 1937	13 E. M. C. 1937	15 E. M. C. 1937

Class OE-5

16 E. M. C. 1939	19 E. M. C. 1939	22 E. M. C. 1940
17 E. M. C. 1939	20 E. M. C. 1939	23 E. M. C. 1941
18 E. M. C. 1935	21 E. M. C. 1940	24 E. M. C. 1941

Nos. 25-34 Vacant

35 OE-6 St. Louis Car Co.	1939	Renumbered 97
36 OE-7 Baldwin	1939	Renumbered 60

37-39 Vacant

40 OE-4 A. L. Co.	69056	1937
41 OE-4 A. L. Co.	69057	1937

42-49 Vacant

50 OE-1 A. L. Co.	66682	1926	Renumbered 98—8-1940
50 OE-8 A. L. Co.	69203	1940	
51 OE-2 A. L. Co.	67107	1928	Renumbered 99—7-1940
51 OE-8 A. L. Co.	69206	1940	
52 OE-8 A. L. Co.	69207	1940	
53 OE-8 A. L. Co.	69504	1941	
54 OE-8 A. L. Co.	69505	1941	

Class OE-10

55-59 Baldwin

Class OE-7

60 Formerly #36				
61 Baldwin	62390	1930	66 Baldwin	64193 1941
62 Baldwin	62400	1940	67 Baldwin	64194 1941
63 Baldwin	62401	1940	68 Baldwin	64390 1942
64 Baldwin	64190	1941	69 Baldwin	64391 1942
65 Baldwin	64192	1941	70 Baldwin	64399 1942

Class OE-10

71 Baldwin	67731	1943	81 Baldwin	— 1943
72 Baldwin	—	1943	82 Baldwin	64431 1942
73 Baldwin	—	1943	83 Baldwin	67722 1943
74 Baldwin	—	1943	84 Baldwin	67723 1943
75 Baldwin	70011	1943	85 Baldwin	67730 1943
76 Baldwin	—	1943	86 Baldwin	— 1943
77 Baldwin	—	1943	87 Baldwin	— 1943
78 Baldwin	—	1943	88 Baldwin	— 1943
79 Baldwin	—	1943	89 Baldwin	— 1943
80 Baldwin	—	1943		

Class OE-9

90 E. M. C. —	91 E. M. C. —	92 E. M. C. —
Nos. 93-96 Vacant		
97 Formerly 35,	98 Formerly 50,	99 Formerly 51.
Nos. 104-109 Vacant		

4-4-0

C-2a	15x24"	58"	120#	44600	61000	9495#
C-3a	15x20"	61"	120#	38000	68000	—
C-4a	16x24"	60"	115#	49000	73000	—
C-5a	17x22"	61½"	120#	44000	73300	10595
C-6a	17x22"	68½"	120#	44600	75400	9680
C-7a	17x22"	61"	120#	60000	88000	10895
C-7a #144	17x24"	61"	120#	60000	88000	10895

110	209	Uncl	P&R*		3-1869	15x22"	56"	54900	Sc.	5-1901
111	1076	Uncl	Baldwin	3639	9-1874	16x24"	58"	71000		10-1902
112	471	C-2a	Baldwin	3219	4-1873					4-1904
113	476	C-2a	Baldwin	3642	9-1874					9-1902
114	477	C-2a	Baldwin	3643	9-1874					1-1903
115	323	C-3a	P&R		6-1871					7-1901
116	328	C-3a	P&R		8-1871					10-1903
117	330	C-3a	P&R		9-1871					2-1903
118	494	Uncl	Baldwin	3680	4-1876	17x22"	61"	Sold—Poulterer & Co.		4-1902
119	462	C-4a	Baldwin	2148	5-1870					
120	469	C-4a	Baldwin	2858	7-1872					
121	191	C-5a	P&R		5-1867					
122	203	C-5a	P&R		11-1868					
123	370	C-5a	P&R		4-1876					
124	312	C-5a			9-1872					
125	307	C-5a	P&R		4-1873					
126	319	C-5a	P&R		4-1873					
127	389	C-5a	P&R		8-1873					
128	396	C-5a	P&R		4-1874					
129	399	C-5a	P&R		7-1874					
130	351	C-5a	P&R		5-1875					
131	350	C-5a	P&R		4-1876					
132	314	C-5a	P&R		5-1876					
133	315	C-5a	P&R		5-1876					
134	400	C-5a	P&R		6-1876					
135	410	C-5a	P&R		3-1878					
136	398	C-6a	P&R		6-1874					
137	354	C-6a	P&R		10-1875					
138	355	C-6a	P&R		11-1875					
139	304	C-6a	P&R		2-1876					
140	23	C-6a	P&R		8-1876					
141	409	C-6a	P&R		9-1876					
142	479	C-7a	Baldwin	3790	11-1875					
143	488	C-7a	Baldwin	3847	3-1876					
144	493	C-7a	Baldwin	3975	8-1876					
145	1200	Uncl	Rogers	4112	2-1889	17x24"	62"	80000	Sc.	11-1905

D-1a	18½x22"	61½"	125#	56000	86000	13010#
D-1b	18½x22"	61½"	130#	62400	93600	13530#
D-1d	18½x22"	61½"	130#	66000	97800	13530#
D-1e	18½x22"	61½"	130#	65800	99500	13530#
D-3d	18½x22"	61½"	160#	66000	97800	18730#
D-3e	18½x22"	61½"	160#	66000	97800	16650#
D-3h	18½x22"	61½"	180#	84000	122500	13530#
D-3i	18½x22"	61½"	160#	71050	106800	13530#
D-3k	18½x22"	61½"	160#	73850	108550	16650

All wide firebox

146	118	D-1a	P&R	11-1879	P&R*	9-1904	D-3h	Sc.	12-1927
147	216	D-1b	P&R	1-1882					1-1907
148	229	D-1e	Baldwin	6752	5-1883	P&R*	10-1903	D-3h	5-1925
149	44	D-1e	Baldwin	6789	6-1883	P&R*	8-1901	D-3i	1-1921
150	58	D-1e	Baldwin	6758	5-1883	P&R*	12-1903	D-3h	1-1926
151	69	D-1e	Baldwin	6805	6-1883	P&R*	10-1906	D-3k	5-1922
152	76	D-1e	Baldwin	6766	5-1883	P&R*	2-1904	D-3h	8-1929
153	142	D-1e	Baldwin	6786	6-1883				2-1907
154	175	D-1e	Baldwin	6784	5-1883				8-1909
155	194	D-1d	Baldwin	6843	7-1883	P&R*	10-1903	D-3e	2-1916
156	449	D-1d	P&R		4-1884				9-1909
157	100	D-1d	P&R		5-1884	P&R*	4-1900	D-3d	12-1928
158	452	D-1d	P&R		5-1884				10-1910

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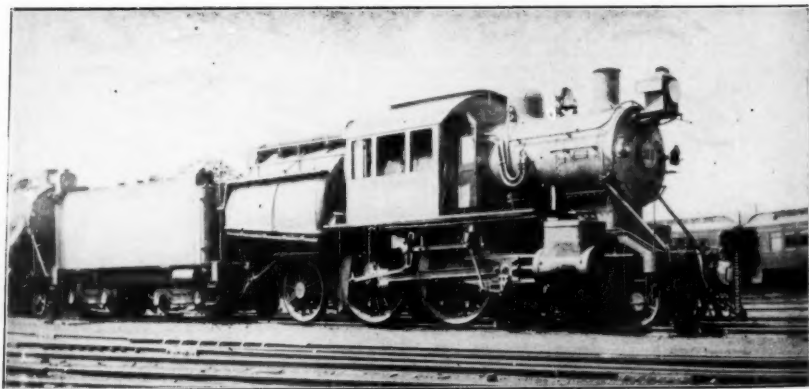
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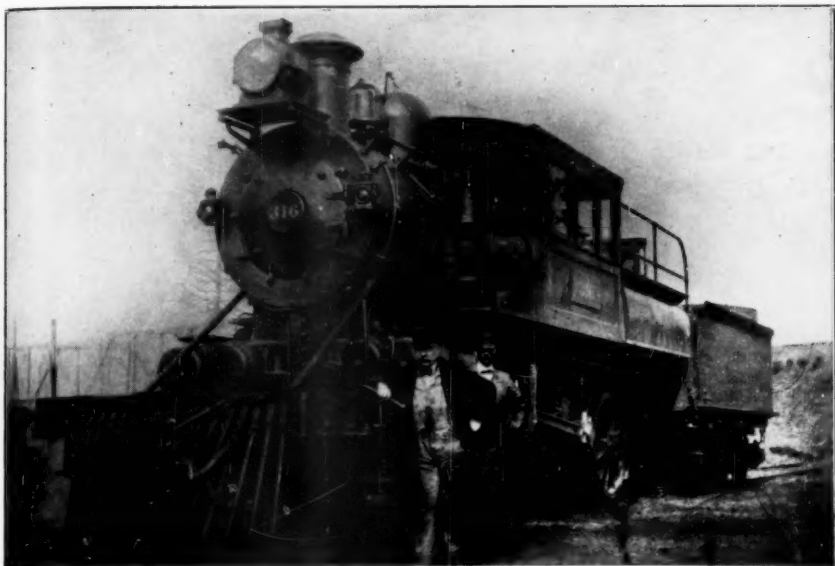
—Courtesy of C. E. Fisher.

P. & R. #302—P-6b—Reading Shops, 1911, at Camden, N. J.



—Courtesy of C. E. Fisher.

P. & R. #310—P-2b, reb. Reading Shops 1914, at Camden, N. J.

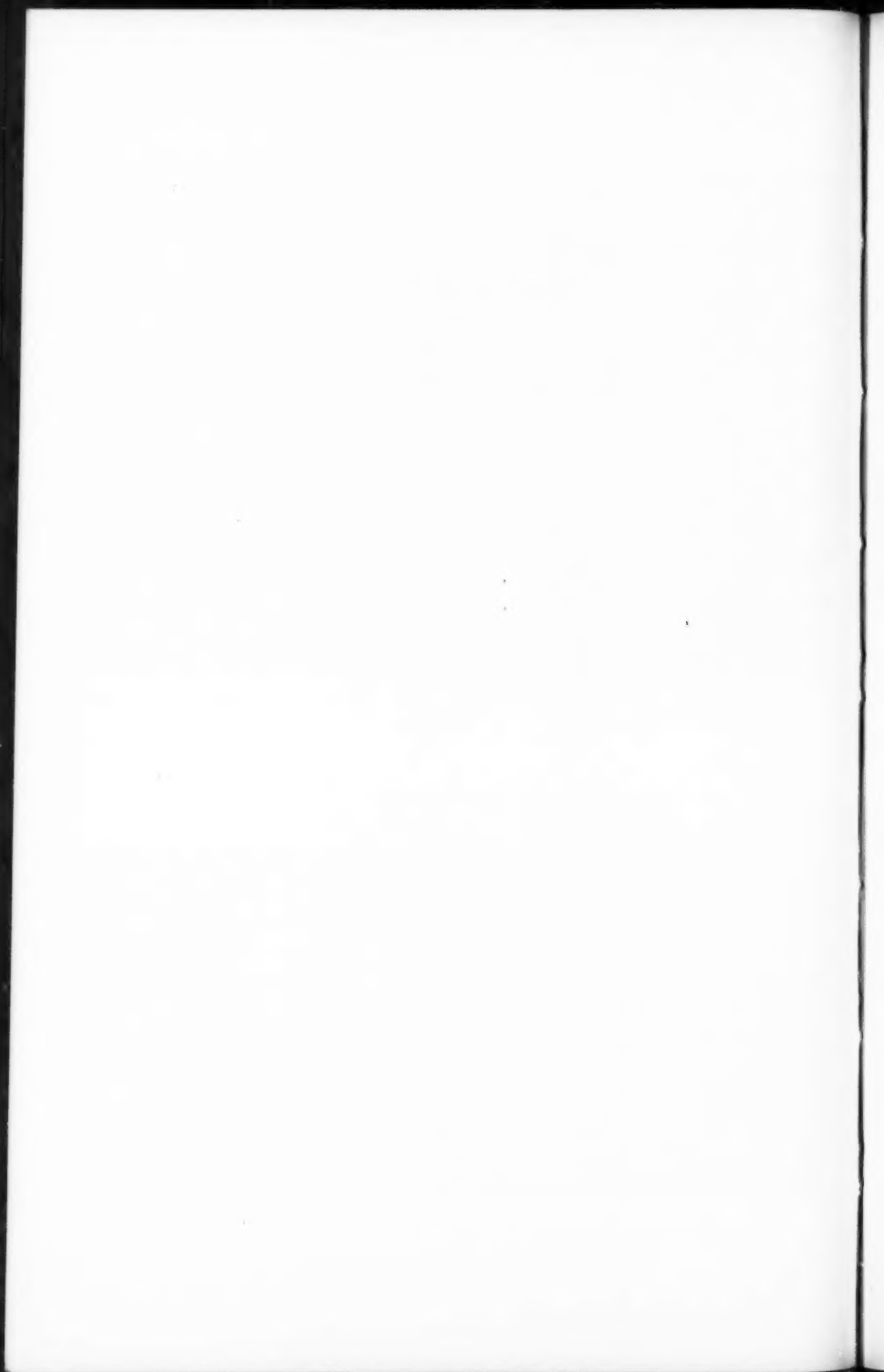


P. & R. #316, 4-2-2, Baldwin, 1895, at Communipaw, N. J., 1902. This locomotive on 2-7-1902 ran from Philadelphia to New York, 90 miles in 84.5 minutes, with probably three cars.



—Courtesy of C. E. Fisher.

P. & R. #323—P-3c, reb. Reading Shops, 1903, at Camden, N. J.



159	139	D-1d	P&R	6-1884				2-1907
160	144	D-1d	P&R	6-1884				11-1905
161	94	D-1d	P&R	7-1884				11-1905
162	95	D-1d	P&R	7-1884				8-1909

D-2a	18½x22"	68½"	130#	62500	95000	12145#
D-2b	18½x22"	68½"	130#	62500	95000	12145#
D-2c	18½x22"	68½"	130#	62500	95000	12145#
D-2d	18½x22"	68½"	130#	62500	95000	12145#
D-3h	18½x22"	61½"	180#	84000	122500	18730#
D-4d	18½x22"	68½"	160#	67000	100000	14950#
D-4h	18½x22"	68½"	160#	81000	118000	14950#

All wide firebox

163	309	D-2a	P&R	3-1881	P&R*	10-1904	D-3h	Sc.	5-1941
164	349	D-2a,b	P&R	7-1881	P&R*	5-1904	D-3h		5-1928
165	219	D-2b	P&R	10-1881	P&R*	3-1904	D-3h		5-1930
166	226	D-2b	P&R	11-1881	P&R*	7-1904	D-3h		6-1927
167	222	D-2c	P&R	4-1882	P&R*	8-1904	D-3h	Sc.	2-1922
168	238	D-2c	P&R	6-1882	P&R*	11-1903	D-3h		5-1941
169	442	D-2c	P&R	8-1882					2-1907
170	453	D-4c	P&R*	11-1899	P&R*		D-4d		1-1921
171	356	D-2c	P&R	12-1882					3-1907
172	359	D-2c	P&R	2-1883					3-1907
173	364	D-2c	P&R	4-1883					8-1914
174	357	D-2d	P&R	3-1884	P&R*	3-1901	D-4h		10-1927

D-3c(W)	18½x22"	61½"	160#	62000	93000	16650#
D-3d(W)	18½x22"	61½"	160#	66000	97000	16650#
D-3e(W)	18½x22"	61½"	160#	66000	97000	16650#
D-3f(W)	18½x22"	61½"	160#	68500	101000	16650#

175	113	D-3f	P&R*	3-1898				Sc.	1-1923
176	224	D-3c	P&R*	3-1899					8-1920
177	348	D-3c	P&R*	7-1899					10-1912
178	220	D-3c	P&R*	11-1898					5-1924
179	361	D-3c	P&R*	5-1898	P&R*	6-1903	D-3e		12-1923
180	218	D-3e	P&R*	3-1899					4-1918
181	49	D-3e	P&R*	3-1898					4-1923
182	57	D-3e	P&R*	3-1899					3-1923
183	101	D-3e	P&R*	1-1899					10-1914
184	196	D-3e	P&R*	7-1899					9-1920
185	143	D-3e	P&R*	9-1898					6-1924
186	190	D-3e	P&R*	1-1899					2-1916
187	28	D-2d	P&R	1-1884	P&R*	3-1901	D-4d		5-1923
188	448	D-3d	P&R*	8-1898					12-1923
189	140	D-3d	P&R*	5-1899					6-1923
190	440	D-3d	P&R*	—					2-1915
191	894	D-3e	P&R*	—					9-1916
192	895	D-3e	P&R*	—					6-1917
193	896	D-3e	P&R*	—					6-1917
194	897	D-3e	P&R*	9-1899					1-1923
195	898	D-3e	P&R*	5-1898					12-1923

D-4b(W)	18½x22"	68½"	160#	67000	100000	14950#
D-4c(W)	18½x22"	68½"	160#	67000	100000	14950#
D-4f(W)	18½x22"	68½"	160#	68700	104500	14950#
D-4g(W)	18½x22"	68½"	160#	69000	104700	14950#

196	373	D-4b,c	P&R*	6-1897	P&R*	—	D-4e	Sc.	5-1923
197	358	D-4b,c	P&R*	8-1898					12-1914
198	372	D-4b,c	P&R*	4-1898	P&R*	—	D-4e		5-1927
199	366	D-4d	P&R*	2-1898				Sc.	12-1923
200	443	D-4d	P&R*	5-1899					2-1921
201	134	D-4f	P&R	7-1886					12-1915
202	206	D-4f	P&R	7-1886					2-1921
203	439	D-4f	P&R	8-1886					3-1918
204	892	D-4f	P&R	8-1886					11-1916
205	893	D-4g	P&R	9-1886					2-1916

As the above numbers became vacant, the following engines were assigned these numbers.

4-4-4

C-1a(W) 23½x26" 80" 240# 133000 230800 36615#

110	P&R	5-1915	Re. 351	112	P&R	7-1915	Re. 350
111	P&R	6-1915	352	113	P&R	7-1915	353

These locomotives were not a success and within a year were rebuilt to locomotives of the 4-4-2 type, reclassified as P-7sa. The Pacific type engines that carry the above numbers were all new engines and were in no way related to the above

4-6-2

G-1sa (W) 25x28" 80" 200# 176925 273600 37185#
G-1sas(W) 25x28" 80" 220# 198520 206340 40900# (streamlined)

105	G-1sa	P&R	6-1916	120	G-1sa	P&R	6-1921
106	G-1sa	P&R	7-1916	121	G-1sa	P&R	6-1921
107	G-1sa	P&R	8-1916	122	G-1sa	P&R	6-1921
108	G-1sa	P&R	8-1916	123	G-1sa	P&R	7-1921
109	G-1sa	P&R	8-1916	124	G-1sa	P&R	7-1921
110	G-1sa	P&R	5-1917	125	G-1sa	P&R	5-1923
111	G-1sa	P&R	6-1917	126	G-1sa	P&R	6-1923
112	G-1sa	P&R	6-1917	127	G-1sa	P&R	6-1923
113	G-1sa	P&R	7-1917	128	G-1sa	P&R	6-1923
114	G-1sa	P&R	7-1917	129	G-1sa	P&R	7-1923
115	G-1sa	P&R	5-1918	130	G-1sa	Baldwin	57756 4-1924
116	G-1sa	P&R	6-1918	131	G-1sa	Baldwin	57757 4-1924
117	G-1sas	P&R	6-1918	132	G-1sa	Baldwin	57758 4-1924
118	G-1sas	P&R	7-1918	133	G-1sa	Baldwin	57759 4-1924
119	G-1sa	P&R	7-1918	134	G-1sa	Baldwin	57760 4-1924

The G-1sas engines were streamlined 11-1937 and #108 was streamlined 12-1934 but the classification was unchanged. Although all bear the same general classification, Nos. 108, and 125-134 carry 220# pressure and Nos. 120-124 carry 210# pressure with 39045# T. E.

G-1sb(W) 25x28" 74" 220# 177210 288120 44200#
G-2sa(W) 25x28" 80" 230# 192540 305360 42800#

175	G-2sa	Baldwin	59226	5-1926	200	G-1sb	Baldwin	58264	3-1925
176	G-2sa	Baldwin	59254	5-1926	201	G-1sb	Baldwin	58265	3-1925
177	G-2sa	Baldwin	59255	5-1926	202	G-1sb	Baldwin	58266	3-1925
178	G-2sa	Baldwin	59256	5-1926	203	G-1sb	Baldwin	58291	3-1925
179	G-2sa	Baldwin	59257	5-1926	204	G-1sb	Baldwin	58292	3-1925

No. 178 was semi-streamlined 9-1936, classification unchanged.

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—Courtesy of C. E. Fisher.

Reading #334—P-4f, reb. Reading Shops, 1914, at Camden, N. J.



—Courtesy of C. E. Fisher.

Reading #343—P-5se, reb. Reading Shops, 1916, at Camden, N. J.

440

D-5a	21x22"	68½"	160#	71000	105000	19260#
D-5c	21x22"	68½"	160#	73000	107000	19260#
D-5d	21x22"	68½"	135#	68000	103000	16250#
D-5e	21x22"	68½"	135#	68000	103000	16250#
D-5g	21x22"	68½"	160#	80750	118150	19260#
D-6a	17x24"	68½"	130#	58000	90000	11190#
D-6b	17x24"	68½"	150#	64000	94000	12910#
D-7a	18x22"	62"	160#	69000	107000	17055#
D-8a	19½x24"	68½"	160#	87000	124000	18120#
D-8b	20x24"	74"	200#	106650	154200	22055#
D-9a	21x22"	78"	175#	79800	120300	18500#
D-9e	21x22"	74"	200#	96050	142475	22290#
D-10a	19x26"	84¼"	200#	98625	150000	18995#
D-10b	19x26"	78½"	200#	103875	154050	20325#
K-1a	19x24"	68½"	145#	84500	113500	15590#
K-1b	19x24"	68½"	145#	77500	113000	15590#
K-1c	19½x24"	68½"	145#	83000	115000	16420#

All class D Engines have wide firebox.

206	411	D-5e	P&R	5-1880	P&R*	—	D-5d	Sc.	3-1907
207	506	D-5d	P&R	6-1880					12-1909
208	96	D-5a	P&R	10-1884	P&R*	—	D-5g		6-1918
209	97	D-5a	P&R	7-1885	P&R*	—	D-5g		8-1911
210	98	D-5a	P&R	6-1885	P&R**	6-1904	D-5g		9-1932
211	99	D-5a	P&R	7-1885	P&R*	—	D-5g		8-1921
212	569	D-5c	Baldwin	10901	5-1890				7-1915
213	570	D-5c	Baldwin	10898	5-1890				2-1927
214	571	D-5c	Baldwin	10902	5-1890				3-1910
215	572	D-5c	Baldwin	10908	5-1890	P&R* 7-1917			5-1933
216	573	D-5c	Baldwin	10918	5-1890				1-1913
217	574	D-5c	Baldwin	10938	5-1890				5-1923
218	575	D-5c	Baldwin	10939	5-1890	P&R* 5-1900	D-9a		
						P&R* 6-1917	D-9e		5-1928
219	576	D-5c	Baldwin	10940	6-1890	P&R* 8-1902	D-9a		
						P&R* 7-1917	D-9e		9-1929
220	577	D-5c	Baldwin	10949	6-1890	P&R* 5-1902	D-a		
						P&R* 10-1917	D-9e	Sc.	4-1933
221	578	D-5c	Baldwin	10956	6-1890	P&R* 12-1900	D-9a		
						P&R* 8-1917	D-9e		11-1929
222	594	D-5c	Baldwin	10948	6-1890				10-1920
223	595	D-5c	Baldwin	10955	6-1890				9-1926
224	596	D-5c	Baldwin	10969	6-1890				4-1931
225	597	D-5c	Baldwin	10971	6-1890				11-1926
226	480	D-6a	P&R*	3-1881					4-1912
227	481	D-6a	P&R*	11-1880					1-1912
228	490	D-6a	P&R*	—					1-1912
229	491	D-6a	P&R*	—					12-1906
230	482	D-6b	P&R*	6-1898					4-1916
231	1201	D-7a	P&R*	4-1897					12-1906
232	1203	D-7a	P&R*	8-1899					6-1926
234	1204	D-7a	P&R*	4-1898					2-1916
235	1205	D-7a	P&R*	10-1898					2-1921
237	1207	D-7a	P&R*	4-1899					7-1920
238	960	D-8a	P&R*	1-1899					9-1924
239	971	D-8a	P&R*	11-1898					12-1933
240	962	D-8a	P&R*	2-1898					4-1926
241	965	D-8a	P&R*	1-1899					12-1933
242	967	K-1a	Baldwin	9250	5-1888				—
243	968	K-1a	Baldwin	9251	5-1888				—
244	969	K-1a	Baldwin	9252	5-1888				—

245	972	K-1a	Baldwin	9258	5-1888			
246	964	K-1c	Baldwin*		1888			
247	966	K-1c	Baldwin*		1888			2-1918
248	963	D-8a	P&R*		6-1899			11-1933
249	961	D-8a	P&R*		6-1899			11-1928
250	970	K-1b	P&R*					
251	385	D-10b	P&R*		5-1904	P&R*	6—	D-10b 7-1933
252	378	D-10a	P&R*		3-1904	P&R*	8-1916	D-10b 5-1930

The following replaced the above numbers:

242		D-8a	P&R*		8-1903			5-1922
243		D-8b	P&R		6-1907			10-1933
244		D-8b	P&R		6-1907			5-1933
245		D-8b	P&R		6-1907			11-1933
246		D-8b	P&R		6-1907			4-1932
250		D-8b	P&R		6-1907			11-1934

4-4-0 Unclassified

232	1202	Rogers		4146	5-1889	18x24"	62"	96200	Sc.	1907
236	1206	Rogers		4163	7-1889	18x24"	62"	96200		12-1925
251	W&N 17	Baldwin		1659	9-1867	17x24"	62"	76000		8-1906
252	W&N 21	Baldwin				17x24"	62"	76000		4-1905
253	W&N 22	Baldwin				17x24"	62"	76000		4-1911
254	W&N 23	Baldwin				17x24"	62"	76000		11-1905
255	W&N 25	Baldwin		2164	6-1870	15x24"	62"	67000		3-1905
256	W&N 26	Baldwin		2107	3-1870	15x24"	62"	67000		1-1903
257	W&N 27	Baldwin				17x24"	62"	76000		7-1906
258	W&N 16	Baldwin		9324	6-1888	17x24"	62"	83000		10-1910
259	W&N 18	Baldwin		9532	10-1888	17x24"	62"	83000		10-1914
260	W&N 24	Baldwin		2108	3-1870	15x24"	62"	67000		5-1900

4-4-0

	D-5f(W)	21x22"	68½"	200#	89000	135000	24080#	All	Baldwin	
260	18894	4-1901	Sc.	10-1933	270	20580	6-1902	Sc.		8-1933
261	18895	4-1901	Sc.	10-1933	271	20581	6-1902	Sc.		8-1928
262	18902	4-1901	Sc.	1-1936	272	20588	6-1902	Sc.		11-1933
263	18903	4-1901	Sc.	12-1932	273	20589	6-1902	Sc.		3-1929
264	18904	4-1901	Sc.	7-1928	274	20590	6-1902	Sc.		9-1933
265	18905	4-1901	Sc.	11-1933	275	20644	7-1902	Sc.		11-1933
266	18921	4-1901	Sc.	6-1928	276	20645	7-1902	Sc.		8-1933
267	18922	4-1901	Sc.	11-1933	277	20646	7-1902	Sc.		1-1928
268	18923	4-1901	Sc.	11-1933	278	20683	7-1902	Sc.		2-1922
269	18924	4-1901	Sc.		279	20687	7-1902	Sc.		9-1928

	D-5h(W)	21x22"	68½"	200#	99480	144100	24080#	All	Baldwin	built
280	27674	3-1906	Sc.	10-1940	288	27742	3-1906	Sc.		7-1933
281	27675	3-1906	Sc.	5-1929	289	27750	3-1906	Sc.		7-1929
282	27691	3-1906	Sc.	1-1936	290	27827	4-1906	Sc.		1-1936
283	27692	3-1906	Sc.	8-1925	291	27828	4-1906	Sc.		5-1933
284	27702	3-1906	Sc.	5-1935	292	27839	4-1906	Sc.		7-1929
285	27718	3-1906	Sc.	3-1931	293	27840	4-1906	Sc.		6-1934
286	27730	3-1906	Sc.	2-1933	294	27841	4-1906	Sc.		11-1933
287	27741	3-1906	Sc.	10-1940						

2-4-2, 2-6-0 and 4-6-0 types

M1-a	13x22x24"	78"	175#	73300	140000	12580#	2-4-2
M-1b	13x22x24"	78"	175#	73300	140000	12580#	2-4-2
N-4a	20x26"	78"	175#	131400	159300	19835#	2-6-0
L-6a	20x26"	78"	175#	?	?	?	4-6-0
L-6b	19x26"	74"	185#	123375	163750	19945#	4-6-0

All Wide Firebox

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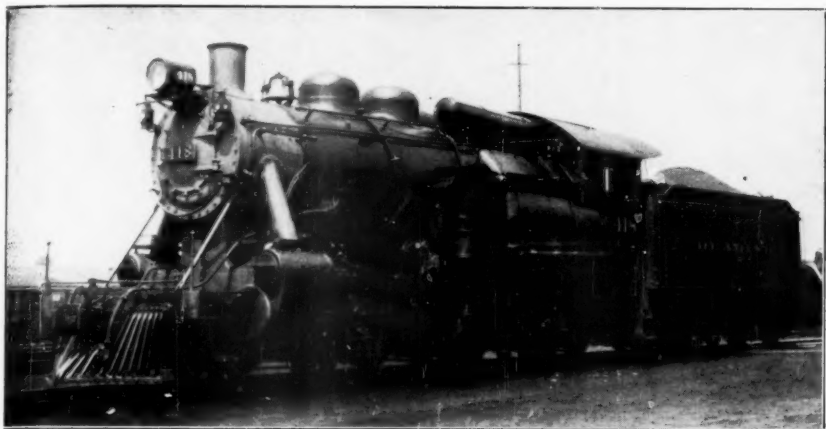
—Courtesy of C. E. Fisher.

P. & R. #344—P-5c, reb. Reading Shops, 1912, at Wayne Jct., Pa.



—Courtesy of K. E. Schlachter.

Reading #379—Q-1a, Baldwin, 1903, at Philadelphia, Pa.

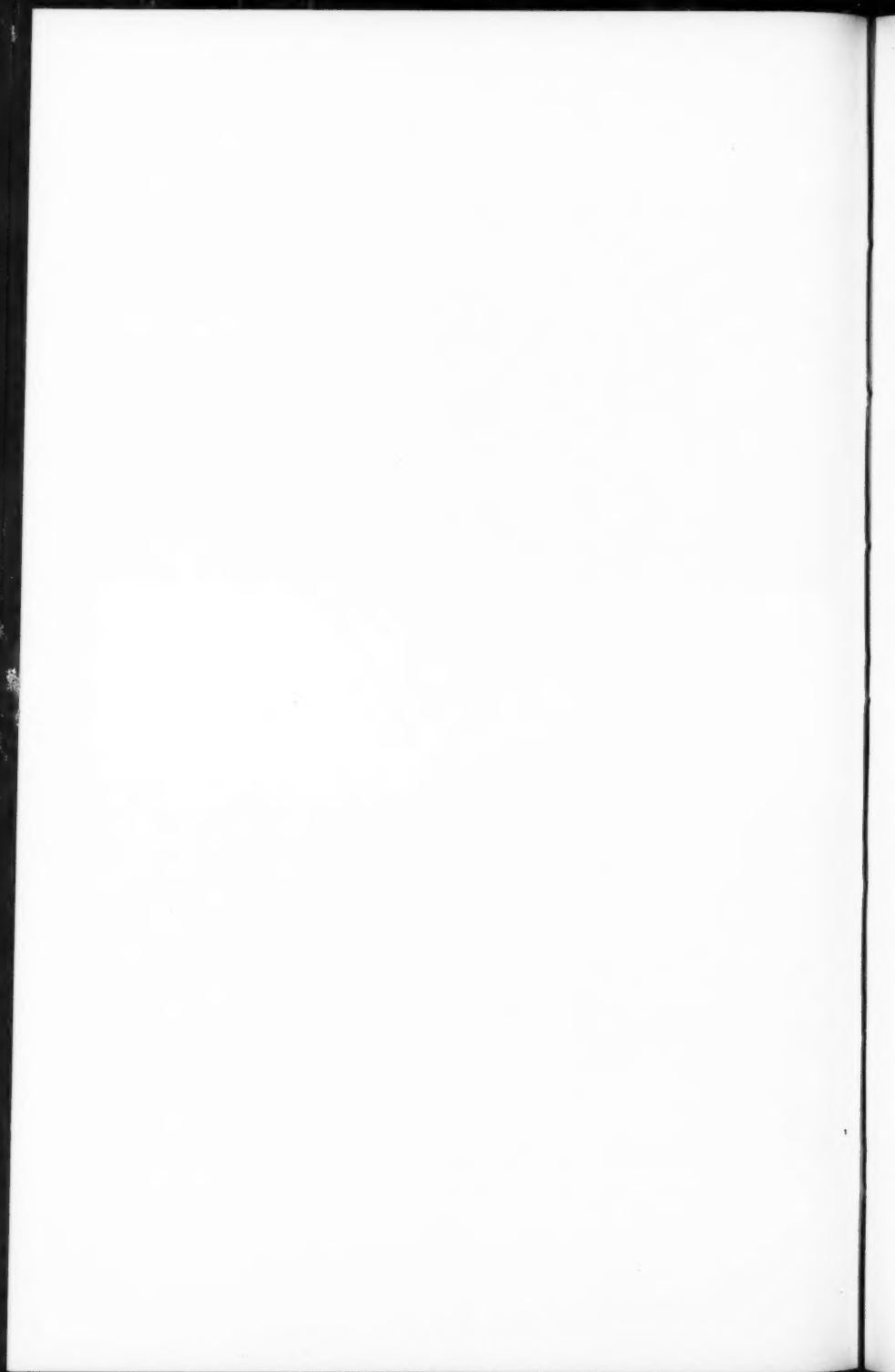


Reading #418—D-11s, Baldwin, 1914, at Rutherford, Pa.



—Courtesy of Clarence R. Weaver.

Reading #556—L-3d. reb. Reading Shops, 1905, at West Milton, Pa.



299	694	L-6b	P&R*	7-1905			Sc.	11-1927
301	618	M-1a	Baldwin	12433	1-1892	P&R*	1904	N-4a 12-1906
302	619	M-1a	Baldwin	12676	5-1892	P&R*	—	N-4a 6-1909
303	620	M-1a	Baldwin	12672	5-1892	P&R*	1904	N-4a
						P&R*	—	L-6a 6-1911
304	621	M-1a	Baldwin	12679	5-1892	P&R*	—	N-4a 5-1908
305	622	M-1a	Baldwin	12680	5-1892	P&R*	—	N-4a
						P&R*	—	L-6b 4-1911
306	679	M-1b	Baldwin	13408	5-1893	P&R*	—	N-4a 12-1906
307	680	M-1b	Baldwin	13409	5-1893	P&R*	—	N-4a 12-1906
308	681	M-1b	Baldwin	13411	5-1893	P&R*	—	N-4a 12-1906
309	683	M-1b	Baldwin	13413	5-1893	P&R*	4-1904	N-4a
						P&R*	—	L-6a 9-1909
310	694	M-1b	Baldwin	13370	4-1893	P&R*	7-1905	L-6b 11-1927
It should be noted that the above engines were renumbered:								
302	N-4a		renumbered	303,	8-1908,		Sc.	6-1909
303	L-6a		renumbered	302,	8-1908,			6-1911
302	L-6a		renumbered	317,	5-1911,			6-1911
310	L-6b		renumbered	299,	5-1911,			11-1927

4-2-2 Rebuilt to 4-4-0

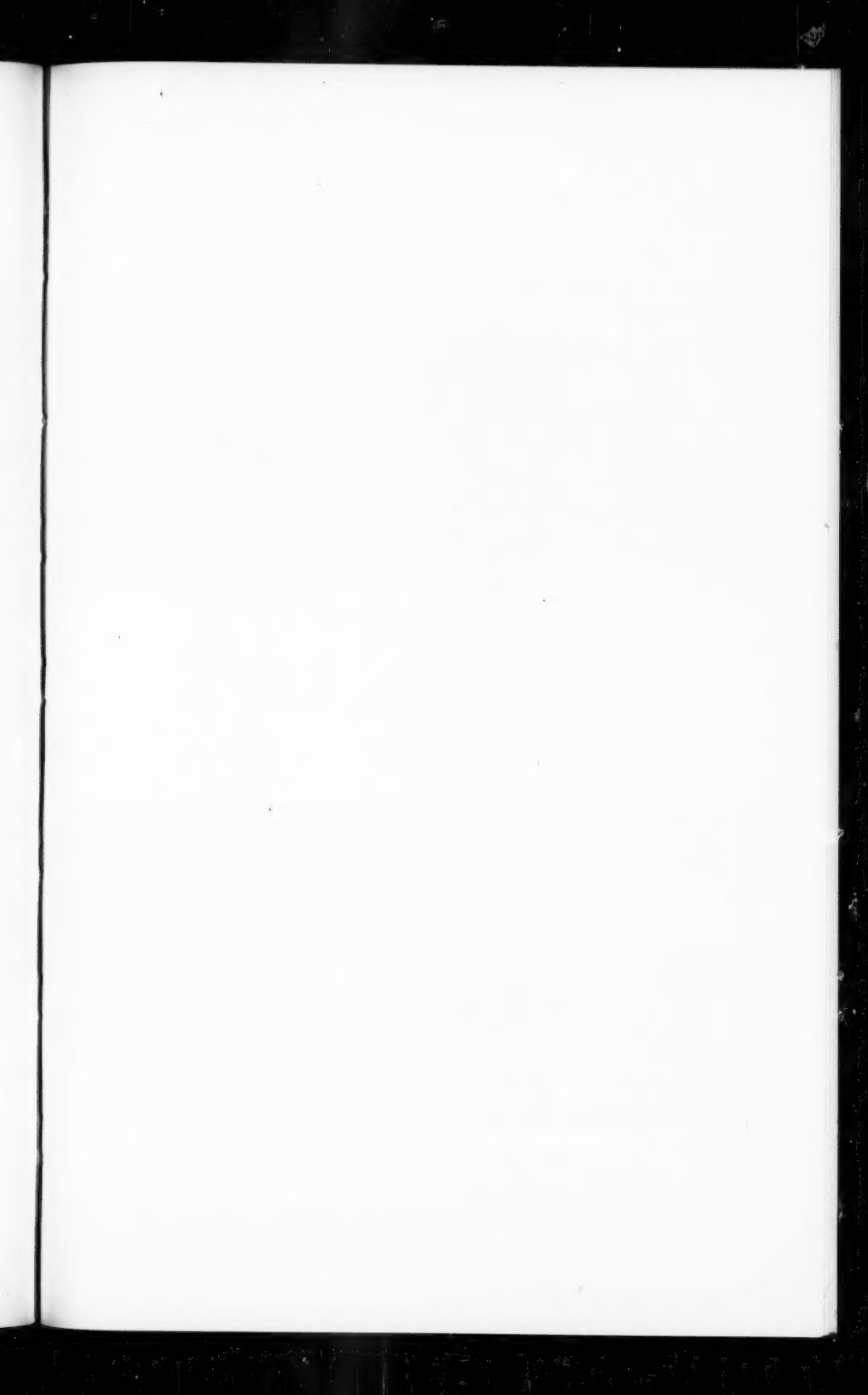
385	Uncl	4-2-2	13&22x26"	84½"	200#	48000	115000	14465#
378	Uncl	4-2-2	13&22x26"	84½"	200#	51600	122400	14465#
	D-10a	4-4-0	19x26"	84½"	200#	98625	150000	18895#
	D-10b	4-4-0	19x26"	78½"	200#	108875	154050	20325#
316	385	Baldwin	14336	6-1895	P&R*	5-1904	Re 251,	D-10b, 5-1911
317	378	Baldwin	14675	1-1896	P&R*	3-1904	252,	D-10a, 5-1911

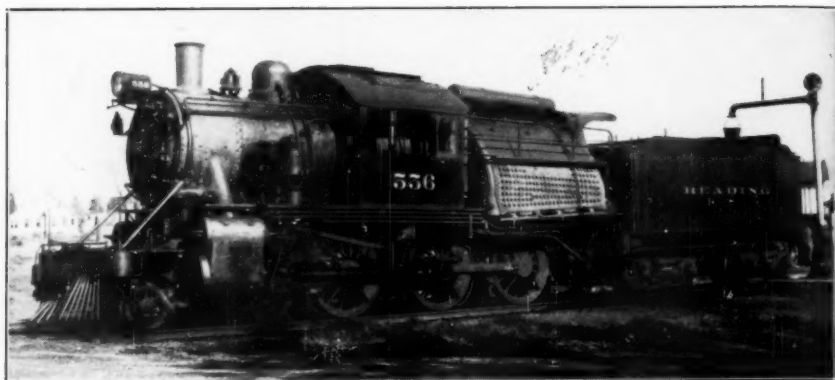
4-4-2

	P-1b	13&22x26"	84½"	200#	81200	153800	14465#
	P-1c	13x22x26"	84½"	200#	87800	167400	14465#
	P-1e	20x26"	84½"	200#	93200	166000	20985#
	P-1f	20x26"	84½"	200#	95850	171100	20985#
	P-2a	20½x26"	78"	205#	102050	192400	24410#
315	P-2a	13&22x26"	78"	175#	78700	140000	12580#
	P-2b	20½x26"	78"	205#	102050	192400	24410#
	P-3a	15&22x24"	84½"	220#	84200	174000	19250#
	P-3b	15&22x24"	84½"	225#	94900	184700	19685#
	P-3c	21x24"	84½"	220#	89900	176650	23490#
	P-3d	21x24"	84½"	220#	99325	185800	23490#
	P-4a	21x24"	84½"	225#	89900	176300	24095#
	P-4b	21x24"	84½"	225#	98600	182000	24095#
	P-4c	21x24"	84½"	225#	100350	186800	24095#
	P-4d	21x24"	80"	225#	107825	192700	24700#
	P-4e	21x24"	80"	225#	105350	196175	24700#
	P-4f	21x24"	84½"	225#	101625	196500	24095#
	P-5a	21x27"	86"	230#	125900	223200	27065#
	P-5b	21½x26"	86"	230#	129475	221950	27320#
	P-5c	(3) 19x24"	80"	230#	124875	234025	31760#
	P-5sc	22x26"	80"	215#	124875	234025	28745#
	P-5sd	23x26"	80"	215#	129035	224020	31420#
	P-5se	23x27"	86"	215#	134500	220500	30350#
	P-6a	(3) 19x24"	80"	240#	126925	223750	33140#
	P-6b	22x26"	80"	240#	122000	217450	32090#
	P-6sb	22x26"	80"	215#	122000	217450	28745#
	P-7sa	23½x26"	80"	215#	129210	231925	32800#
	P-7sb	23½x26"	80"	215#	129210	231925	32800#

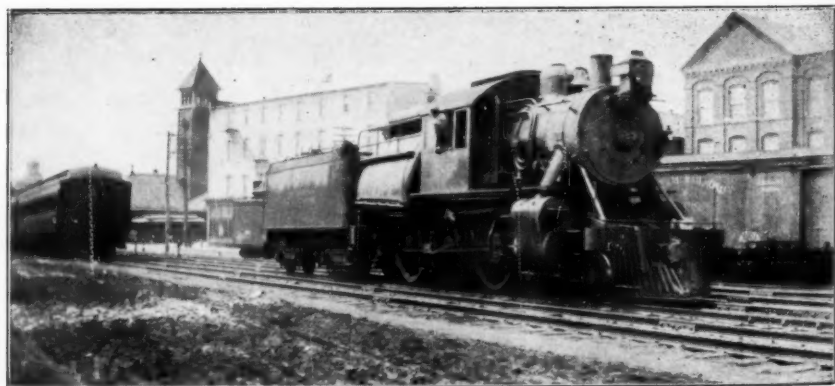
All wide fireboxes.

300	P-6a	P&R	6-1911	P&R*	4-1917	P-6sb	
301	P-2a	P&R	6-1907	Renumbered	316, 5-1911		
301	P-6b	P&R	6-1911	P&R*	1-1923	P-6sb	
302	P-6b	P&R	6-1911	P&R*	6-1916	P-6sb	
303	P-6a	P&R	6-1909	P&R*	6-1916	P-6sb	18 1/2 x 24"
304	P-2a	P&R	11-1909	P&R*	1-1914	P-2b	Sc. 1-1936
305	P-2a	P&R	6-1911	P&R*	3-1914	P-2b	1-1936
306	P-2a	P&R	6-1907	P&R*	6-1915	P-2b	1-1936
307	P-2a	P&R	6-1907	P&R*	1-1914	P-2b	1-1936
308	P-2a	P&R	6-1907	P&R*	10-1913	P 2b	11-1934
309	P-2a	P&R	11-1909	P&R*	11-1914	P-2b	3-1935
310	P-2a	P&R	6-1911	P&R*	4-1914	P-2b	7-1934
311	376 P-1b	Baldwin	15880	4-1898	P&R*	3-1904	P-1e 8-1932
312	377 P-1b	Baldwin	15881	4-1898	P&R*	6-1904	P-1e 12-1932
313	383 P-1b	Baldwin	15882	4-1898	P&R*	4-1904	P-1e 11-1927
314	384 P-1b	Baldwin	15883	4-1898	P&R*	4-1904	P-1e 8-1928
315	682 P-2a	P&R*	1899	P&R*	—	L-6a	3-1908
315	P-2a	P&R	3-1908	P&R*	4-1915	P-2b	11-1934
316	P-2a	P&R	6-1907	P&R*	—	P-2b	12-1923
317	P-2a	P&R	6-1911	P&R*	5-1914	P 2b	2-1931
318	P-1c	Baldwin	17787	5-1900	P&R*	2-1904	P-1f 9-1933
319	P-1c	Baldwin	17788	5-1900	P&R*	6-1904	P-1f 9-1933
320	P-1c	Baldwin	17812	6-1900	P&R*	4-1904	P-1f 7-1930
321	P-1c	Baldwin	17813	6-1900	P&R*	1-1904	P-1f 10-1933
322	P-3a	Baldwin	17741	5-1900	P&R*	1-1904	P-3c
					P&R*	12-1914	P-3d 9-1933
323	P-3a	Baldwin	17742	5-1900	P&R*	12-1903	P-3c
					P&R*	4-1923	P-3d 8-1933
324	P-3a	Baldwin	17765	5-1900	P&R*	11-1903	P-3c
					P&R*	4-1922	P-3d 1-1933
325	P-3a	Baldwin	17766	5-1900	P&R*	11-1903	P-3c
					P&R*	7-1915	P-3d 7-1930
326	P-3a	Baldwin	17767	5-1900	P&R*	12-1903	P-3c
					P&R*	3-1916	P-3d 1-1933
327	P-3a	Baldwin	17768	5-1900	P&R*	3-1904	P-3c
					P&R*	4-1914	P-3d 8-1933
328	P-4a	Baldwin	20529	6-1902	P&R*	5-1914	P-4d 2-1933
329	P-3b	Baldwin	20531	6-1902	P&R*	2-1904	P-4a
					P&R*	2-1915	P-4d 3-1933
330	P-4b	Baldwin	22266	5-1903	P&R*	3-1917	P-4e 6-1935
331	P-4b	Baldwin	22267	5-1903	P&R*	4-1916	P-4e 6-1935
332	P-4b	Baldwin	22274	6-1903	P&R*	3-1915	P-4e Sc. 6-1935
333	P-4b	Baldwin	22287	6-1903	P&R*	2-1914	P-4e 6-1935
334	P-4c	Baldwin	24164	4-1904	P&R*	4-1914	P-4f 9-1933
335	P-4c	Baldwin	24172	5-1904	P&R*	2-1915	P-4f 7-1933
336	P-4c	Baldwin	24188	5-1904	P&R*	3-1917	P-4f 8-1935
337	P-4c	Baldwin	24199	5-1904	P&R*	3-1917	P-4f 11-1934
338	P-4c	Baldwin	24225	5-1904	P&R*	2-1915	P-4f 3-1935
339	P-4c	Baldwin	24272	5-1904	P&R*	2-1914	P-4f 8-1935
340	P-5a	P&R	2-1906	P&R*	3-1917	P-5se*	4-1944
341	P-5a	P&R	4-1906	P&R*	2-1915	P-5sd	
342	P-5a	P&R	5-1906	P&R*	5-1916	P-5se	
343	P-5a	P&R	5-1906	P&R*	6-1916	P-5se	
344	P-5a	P&R	5-1906	P&R*	6-1912	P-5c	
					P&R*	6-1917	P-5sc
345	P-5b	P&R	6-1906	P&R*	3-1915	P-5sd	
346	P-5b	P&R	7-1906	P&R*	3-1915	P-5sd	
347	P-5b	P&R	8-1906	P&R*	12-1914	P-5sd	
348	P-5b	P&R	9-1906	P&R*	3-1917	P-5se	
349	P-5b	P&R	11-1906	P&R*	6-1915	P-5se Ret. 4-1944	
350	112 P-7sa	P&R*	1916	P&R*	3-1924	P-7sb	





Reading #556—L-3ss, reb. Reading Shops, 1921.



—Courtesy of C. E. Fisher.

P. & R. #589—L-5ss, reb. Reading Shops, 1917, at Allentown, Pa.

351	110	P-7sa	P&R*	1916	P&R*	4-1924	P-7sb
352	111	P-7sa	P&R*	1916	P&R*	4-1924	P-7sb
353	113	P-7sa	P&R*	1916	P&R*	4-1924	P-7sb

No. 315, although first classified as P-2a in reality had 13&22x26" cyl. 78"
175# 78700 140000 12580#(W)

No. 303, although classified as P-6a in reality had (3)18x½x24" 80" 225#
122000 217450 28745#(W)

2-6-4T — Suburban

	Q-1a(W)	20x24"	61½"	200#	120860	201700	26535#				
	Q-1b(W)	20x24"	61½"	200#	115925	211625	26535#				
	Q-1c(W)	20x24"	61½"	200#	127900	204800	26500#				
	Q-1d(W)	20x24"	61½"	200#	115925	211625	26585#				
376	Q-1a	Baldwin	22591	8-1903	P&R*	11-1921	Q-1c	Sc.	1-1936		
377	Q-1a	Baldwin	22613	8-1903	P&R*	9-1921	Q-1c		9-1930		
378	Q-1a	Baldwin	22617	8-1903	P&R*	6-1922	Q-1c		1-1936		
379	Q-1a	Baldwin	22627	8-1903	P&R*	4-1922	Q-1c		10-1933		
380	Q-1a	Baldwin	22636	8-1903	P&R*	12-1921	Q-1c		1-1936		
381	Q-1a	Baldwin	22673	8-1903	P&R*	8-1921	Q-1c		1-1934		
382	Q-1b	Baldwin	24175	5-1904	P&R*	3-1922	Q-1c		1-1936		
383	Q-1b	Baldwin	24176	5-1904	P&R*	8-1920	Q-1c		1-1936		
384	Q-1b	Baldwin	24226	5-1904	P&R*	2-1922	Q-1c		11-1934		
385	Q-1b	Baldwin	24227	5-1904	P&R*	10-1921	Q-1c		9-1933		

All changed to class Q-1d

4-6-0

	F-1a	18x22"	48"	115#	60400	84000	14515#				
	F-1b	18x22"	48"	120#	62000	85000	15145#				
	F-1c	18x22"	48"	115#	57100	83700	14515#				
	F-1d	18x22"	48"	120#	56000	83600	15145#				
401	1053	F-1a	P&R		1864			Sc.	11-1905		
402	132	F-2c	P&R*		1899				4-1905		
403	138	F-1a	P&R		11-1864	P&R*	—	F-1c	4-1911		
404	141	F-1a	P&R		1-1865				1-1905		
405	157	F-1a	P&R		8-1864				1-1903		
406	158	F-1a	Norris-Lanc		1865				3-1905		
407	161	F-1a	Norris-Lanc		1865	Sold—Poulterer & Co.			1902		
408	164	F-1a	P&R		8-1865	Sold—Poulterer & Co.			4-1902		
409	165	F-1a	P&R		8-1865	P&R*	—	F-1c	Sc.	4-1911	
410	167	F-1a	Norris-Lanc		1865	Sold—Poulterer & Co.			1902		
411	170	F-1a	P&R		10-1865			Sc.	3-1905		
412	171	F-1a	P&R		10-1865				11-1907		
413	178	F-1a	Norris-Lanc		1866	Sold—Poulterer & Co.			1902		
414	180	F-1a	E. S. Norris		1866			Sc.	3-1905		
415	181	F-1a	E. S. Norris		1866	P&R*	—	F-1c	4-1905		
416	184	F-1a	Norris-Lanc		1866				3-1905		
417	207	F-1b	P&R		2-1869				3-1903		
418	211	F-1b	P&R		3-1869	Sold—D. Gring			6-1902		
419	231	F-1b	P&R		6-1869			Sc.	3-1905		
420	233	F-1b	Baldwin	1882	5-1869				2-1903		
421	236	F-1b	Baldwin	1893	5-1869				7-1902		
422	237	F-1b	Baldwin	1891	5-1869				11-1905		
423	242	F-1b	Baldwin	1910	6-1869				11-1905		
424	246	F-1b	P&R		8-1869	P&R*	—	F-1d	8-1906		
425	261	F-1b	P&R		1-1870	Sold—D. Gring			6-1902		
426	263	F-1b	P&R		3-1870			Sc.	4-1905		
427	269	F-1b	P&R		4-1870				1-1903		
428	275	F-1b	P&R		5-1870				11-1907		

429	287	F-1b	P&R	8-1870	Sold—D. Gring			12-1902
430	289	F-1b	P&R	9-1870			Sc.	4-1905
431	321	F-1b	P&R	3-1871				3-1905
432	322	F-1b	P&R	5-1871				8-1903
433	325	F-1b	P&R	7-1871	P&R*	—	F-1d	9-1911
434	327	F-1b	P&R	8-1871	P&R*	—	F-1d	10-1906
435	329	F-1b	P&R	8-1871			Sc.	4-1912
436	336	F-1b	P&R	11-1871				8-1912
437	337	F-1b	P&R	11-1871			Sc	10-1902
438	338	F-1b	P&R	11-1871				4-1905
439	35	F-1b	P&R	3-1872				3-1907
440	38	F-1b	P&R	8-1872	P&R*	—	F-1d	11-1912
441	15	F-1b	P&R	9-1872				9-1911
442	353	F-1b	P&R	10-1872				3-1905
443	374	F-1b	P&R	11-1872				11-1907
444	375	F-1b	P&R	11-1872				5-1912
445	379	F-1b	P&R	1-1873	P&R*	—	F-1d	5-1911

4-4-0

	D-8c (W)	20x24"	68½"	210#	115250	166925	25015#	
	D-8sd(W)	21x24"	68½"	200#	120663	169825	26265#	
	D-11s(W)	21x24"	68½"	210#	120528	173490	27580#	
400	D-8c	P&R		4-1911				Sc. i0-1940
401	D-8c	P&R		4-1911	P&R*	1-1922	D-8sd	10-1940
402	D-8c	P&R		4-1911				4-1932
403	D-8c	P&R		4-1911				4-1932
404	D-8c	P&R		4-1911	P&R*	3-1920	D-8sd	10-1940
405	D-8c	P&R		4-1911				6-1935
406	D-8c	P&R		4-1911	P&R*	6-1920	D-8sd	
407	D-8c	P&R		5-1911	P&R*	12-1920	D-8sd	10-1940
408	D-8c	P&R		5-1911	P&R*	5-1920	D-8sd	10-1940
409	D-8c	P&R		5-1911				7-1934
410	D-11s	Baldwin	41191	2-1914				5-1941
411	D-11s	Baldwin	41192	2-1914				4-1944
412	D-11s	Baldwin	41193	2-1914				5-1941
413	D-11s	Baldwin	41194	2-1914				5-1941
414	D-11s	Baldwin	41195	2-1914				5-1941
415	D-11s	Baldwin	41213	3-1914				5-1941
416	D-11s	Baldwin	41214	3-1914				5-1941
417	D-11s	Baldwin	41215	3-1914				5-1941
418	D-11s	Baldwin	41216	3-1914				
419	D-11s	Baldwin	41217	3-1914				

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	F-2a	18x22"	48"	145#	63800	91300	18300#	
	F-2b	18x22"	48"	145#	68500	92100	18300#	
	F-2c	18x22"	48"	145#	67500	91500	18300#	
	F-2e	18x22"	48"	145#	64800	93800	18300#	
446	131	F-2c	P&R*	7-1899				Sc. 3-1912
447	174	F-2c	P&R*	6-1899				4-1916
448	135	F-2a	P&R*	—				3-1915
449	230	F-2b	P&R*	—				12-1911
450	77	F-2e	P&R*	—				11-1913
451	87	F-2a	P&R*	—				4-1905
452	352	F-2b	P&R*	2-1888				8-1925
453	155	F-2a	P&R*	—				10-1912
454	239	F-2b	P&R*	—				7-1913

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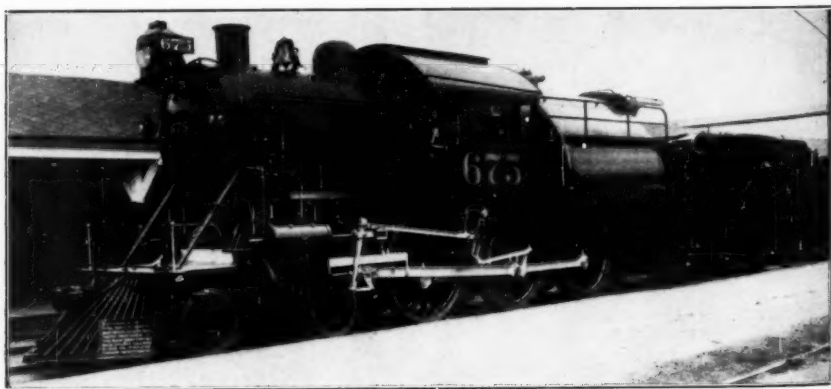
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—Courtesy of the Reading Co.

Reading #616—L-6sa, reb. Reading Shops, 1930.



—Courtesy of the Reading Co.

Reading #675—L-10a, Reading Shops, 1911.

455	250	F-2b	P&R*	7-1888				11-1923
456	169	F-2a	P&R*	—				4-1913
457	339	F-2b	P&R*	—				5-1917
458	241	F-2b	P&R*	—				6-1913
459	345	F-2a	P&R*	1889	Sold—Catasauqua & Fogelsville Ry. Re. 94, 9-1903			
460	163	F-2b	P&R*	—	P&R*	—	F-2a	Sc. 8-1913
461	162	F-2a	P&R*	—				Sc. 7-1913
462	78	F-2e	P&R*	—				2-1916
463	159	F-2a	P&R*	—				10-1912
464	160	F-2a	P&R*	2-1890				1-1916
465	18	F-2b	P&R*	—				1-1910
466	265	F-2b	P&R*	—				2-1916

	F-3a(W)	18x22"	48"	120#	63500	89200	15145#	
	F-4a(W)	18x22"	48"	145#	73000	98000	18300#	
	F-4b(W)	18x22"	48"	145#	76000	103000	18300#	
467/	88	F-3a	P&R*	—				Sc. 4-1905
468	234	F-4b	P&R*	9-1877				5-1917
469	240	F-4b	P&R*	2-1894				8-1917
470	168	F-4a	P&R*	—	Sold—Quakertown & Bethlehem R. R., 8-1918			
471	153	F-4a	P&R*	—				Sc. 5-1915
472	156	F-4a	P&R*	1890				9-1920
473	176	F-4a	P&R*	—				10-1912
474	248	F-4b	P&R*	—				1-1915
475	223	F-4a	P&R*	9-1891				1-1918
476	282	F-4b	P&R*	5-1891				5-1916
477	92	F-4a	P&R*	—				8-1909
478	244	F-4b	P&R*	—				8-1915
479	39	F-4a	P&R*	—				4-1915
480	166	F-4b	P&R*	8-1892				1-1921
481	1052	F-4b	P&R*	—				11-1915
482	1051	F-4b	P&R*	1-1893				12-1920
483	185	F-4b	P&R*	12-1892				5-1916

4-6-0 Unclassified

484	145	Norris-Phila.	1865	17x22"	55"	110#	65475	Sc. 4-1903
485	147	Norris-Phila.	1865	17x22"	55"	110#	65475	7-1901
486	148	Norris-Lanc.	1865	17x22"	55"	110#	67275	4-1901
487	149	Norris-Phila.	1865	17x22"	55"	110#	65475	4-1901
488	152	Norris-Lanc.	1865	17x22"	55"	110#	67275	Sold—Poulterer & Co., 8-1902

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	H-1a	18x24"	54"	120#	63000	89000	14690#	
489	5	P&R	4-1873	Sc. 9-1911	498	40	P&R	9-1874
490	51	P&R	5-1873	10-1902	499	123	P&R	9-1875
491	380	P&R	5-1873	Note	500	63	P&R	2-1876
492	382	P&R	6-1873	7-1911	501	405	P&R	4-1876
493	388	P&R	7-1873	Note	502	406	P&R	9-1876
494	391	P&R	9-1873	9-1912	503	407	P&R	10-1876
495	392	P&R	9-1873	9-1911	504	45	P&R	9-1877
496	26	P&R	5-1874	4-1905	505	316	P&R	10-1877
497	32	P&R	6-1874	11-1906				10-1911

Nos. 491, 500 & 504 were sold to Poulterer & Co., 4-1902

Nos. 493 & 502 were sold to D. Gring, 6-1902

		H-2a	18x24"	54"	145#	69500	95000	17750#		
		H-2b	18x24"	54"	145#	63300	94000	17750#		
		H-3a(W)	18x24"	54"	120#	75000	98300	14690#		
		H-4a(W)	18x24"	54"	145#	73500	103400	17750#		
		H-5a	18x22"	52"	115#	62000	82000	?		
		H-6a	18x22"	52"	115#	61000	80500	?		
		H-7a	18x22"	52"	115#	65000	87000	14615#		
506	16	H-2b	P&R*		3-1899				Sc.	1-1918
507	9	H-2a	P&R*		—					7-1911
508	408	H-2a	P&R*		—					8-1920
509	394	H-2a	P&R*		—					8-1915
510	393	H-2a	P&R*		11-1888					10-1920
511	43	H-2a	P&R*		—					8-1916
512	119	H-2a	P&R*		—					12-1910
513	412	H-3a	P&R		3-1878					12-1906
514	24	H-4a	P&R*		—					10-1912
515	60	H-4a	P&R*		12-1897					1-1921
516	46	H-4a	P&R*		7-1890					10-1921
517	13	H-4a	P&R*		10-1890					4-1921
518	386	H-4a	P&R*		10-1890					3-1921
519	395	H-4a	P&R*		5-1891					8-1922
520	72	H-4a	P&R		—					9-1912
521	390	H-4a	P&R*		—				Sc.	11-1914
522	438	H-5a	Baldwin	2156	6-1870	Sold—D. Gring,				6-1902
523	456	H-5a	Baldwin	1733	6-1868	Sold—D. Gring,				6-1902
524	458	H-5a	Baldwin	1813	12-1868				Sc.	1-1903
525	465	H-6a	Baldwin	2203	8-1870					10-1900
526	466	H-6a	Baldwin	2204	8-1870					2-1903
527	441	H-7a	Baldwin	3583	5-1874	Sold—D. Gring,				6-1902
528	444	H-7a	Baldwin	3666	11-1874				Sc.	3-1913
529	484	H-7a	Baldwin	3920	6-1876					12-1911
530	492	H-7a	Baldwin	3932	6-1876					11-1905

Unclassified

526		Richmond	1900	4-6-0	18x24"	61½"	130225	Sc.	9-1922
527		Baldwin	12619	4-1892	4-6-0	20x24"	61½"		5-1923
528	623	P&R(W)		—	2-6-0	20x24"	61½"		2-1920

Nos. 526 & 527 from Mt. Carmel & Natalie R. R. 2 & 9-1908.

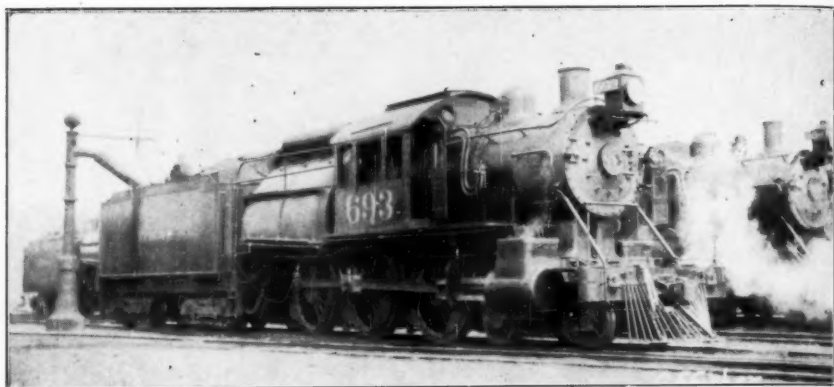
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		L-1a(W)	20x24"	61½"	145#	93000	121000	19240#		
		L-1b(W)	20x24"	61½"	160#	108300	131800	21230#		
		L-1c(W)	20x24"	61½"	175#	95500	129900	23200#		
		L-2a(W)	13½x23x24"	61½"	175#	99200	130500	17330#		
531	554	L-1a	Baldwin	10705	3-1890	P&R*	5-1902	L-1b	Sc.	5-1926
532	555	L-1a	Baldwin	10706	3-1890					7-1926
533	556	L-1a	Baldwin	10707	3-1890	P&R*	—	L-1c		1-1927
534	557	L-1a	Baldwin	10708	3-1890					12-1914
535	558	L-1a	Baldwin	10718	3-1890	P&R*	12-1916	L-1c		2-1927
536	559	L-1a	Baldwin	10712	3-1890	P&R*	10-1917	L-1c		1-1928
537	560	L-1a	Baldwin	10719	3-1890					8-1927
538	561	L-1a	Baldwin	10720	3-1890					7-1922
539	562	L-1a	Baldwin	10721	3-1890	P&R*	10-1917	L-1c		4-1944
540	563	L-1a	P&R*		9-1893					2-1929
541	564	L-1a	Baldwin	10729	3-1890					10-1940
542	565	L-1a	Baldwin	10724	3-1890					7-1922
543	566	L-1a	Baldwin	10737	3-1890					5-1923
544	567	L-1a	Baldwin	10748	3-1890					10-1920

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—Courtesy of C. E. Fisher.

Reading #693—L-8a, Baldwin, 1906, at Camden, N. J.



—Courtesy of C. E. Fisher.

Reading #708—I-2e, Reading Shops, 1906, at Camden, N. J.

545	568	L-1a	Baldwin	10745	3-1890					8-1927
546	608	L-2a	Baldwin	12382	12-1891	P&R*	12-1904	L-1c		5-1924
547	609	L-2a	Baldwin	12383	12-1891	P&R*	6-1903	L-1c		9-1926
548	610	L-2a	Baldwin	12379	12-1891	P&R*	1-1904	L-1c		3-1935
549	611	L-2a	Baldwin	12393	1-1892	P&R*	12-1903	L-1c		4-1922
550	612	L-2a	Baldwin	12396	1-1892	P&R*	—	L-1c		4-1922
551	613	L-2a	Baldwin	12401	1-1892	P&R*	6-1904	L-1c		4-1944
552	614	L-2a	Baldwin	12402	1-1892	P&R*	9-1902	L-1c		11-1926
553	615	L-2a	Baldwin	12418	1-1892	P&R*	6-1904	L-1c	Sc.	9-1924
554	616	L-2a	Baldwin	12425	1-1892	P&R*	4-1904	L-1c		5-1926
555	617	L-2a	Baldwin	12424	1-1892	P&R*	8-1903	L-1c		12-1927
	L-3a	14&24x26"	61½"	200#	111000	152000	23415#			
	L-3b	14&24x26"	61"	200#	112700	155600	23415#		Rebuilt	
		22x26"	61"	200#	112700	155600	35070#		Rebuilt	
		21x26"	61½"	185#	117075	157050	29300#			
	L-3c	22x26"	61½"	200#	111000	152000	35070#			
	L-3d	21x26"	61½"	185#	119125	155250	29300#			
	L-3se(W)	22x26"	61½"	200#	139375	187500	34750#			
556	12	L-3a	Baldwin	15900	5-1898	P&R*	7-1905	L-3d		
						P&R*	11-1921	L-3se		
557	14	L-3a	Baldwin	15901	5-1898	P&R*	5-1905	L-3c		
						P&R*	3-1906	L-3d		
						P&R*	1-1922	L-3se		
558	31	L-3a	Baldwin	15902	5-1898	P&R*	5-1904	L-3c		
						P&R*	5-1906	L-3d		
						P&R*	4-1923	L-3se		
559	48	L-3a	Baldwin	15903	5-1898	P&R*	6-1904	L-3c		
						P&R*	7-1904	L-3d		
						P&R*	3-1921	L-3se	Sc.	10-1940
560	187	L-3a	Baldwin	15904	5-1898	P&R*	6-1904	L-3c		
						P&R*	12-1905	L-3d		
						P&R*	7-1923	L-3se		
561	214	L-3a	Baldwin	15905	5-1898	P&R*	6-1904	L-3c		
						P&R*	7-1904	L-3d		
						P&R*	9-1920	L-3se		
562	227	L-3a	Baldwin	15906	5-1898	P&R*	3-1905	L-3c		
						P&R*	5-1906	L-3d		
						P&R*	8-1923	L-3se		
563	270	L-3a	Baldwin	15907	5-1898	P&R*	1-1905	L-3c		
						P&R*	12-1905	L-3d		
						P&R*	1-1921	L-3se		
564	333	L-3a	Baldwin	15908	5-1898	P&R*	3-1902	L-3b—see above		
						P&R*	11-1923	L-3se		
	L-4a(W)	14&24x26"	61"	200#	120100	161000	23415#			
	L-4b	14&24x26"	61"	200#	111400	157300	23415#			
	L-4c(W)	22x26"	61"	200#	120100	161000	35070#			
	L-4d	22x26"	61"	200#	111400	157300	35070#			
	L-4e(W)	21x26"	61½"	200#	129025	167200	31700#			
	L-4f	21x26"	61½"	185#	114825	155525	29300#			
565	433	L-4a	Baldwin	16656	4-1899	P&R*	4-1900	L-4c		
						P&R*	9-1905	L-4e	Sc.	4-1944
566	435	L-4a	Baldwin	16657	4-1899	P&R*	12-1904	L-4c		
						P&R*	12-1906	L-4e		5-1941
567	436	L-4a	Baldwin	16658	4-1899	P&R*	1-1905	L-4c		
						P&R*	5-1906	L-4e		2-1937
568	450	L-4a	Baldwin	16659	4-1899	P&R*	3-1905	L-4c		
						P&R*	11-1905	L-4e		
569	455	L-4a	Baldwin	16660	4-1899	P&R*	3-1905	L-4c		
						P&R*	5-1908	L-4e		10-1940

571	L-4b	Baldwin	17907	7-1900	P&R*	7-1904	L-4d		
					P&R*	6-1905	L-4f		
572	L-4b	Baldwin	17908	7-1900	P&R*	8-1904	L-4d		
					P&R*	10-1905	L-4f		
					P&R*	4-1923	L-3se		
573	L-4b	Baldwin	17918	7-1900	P&R*	2-1905	L-4d		
					P&R*	7-1906	L-4f		
					P&R*	4-1926	L-3se		
574	L-4b	Baldwin	17944	7-1900	P&R*	10-1904	L-4d		
					P&R*	8-1906	L-4f		
					P&R*	4-1926	L-3se		
575	L-4b	Baldwin	17945	7-1900	P&R*	3-1905	L-4d		
					P&R*	11-1905	L-4f	Sc.	12-1928
576	L-4b	Baldwin	17953	7-1900	P&R*	4-1904	L-4d		
					P&R*	6-1905	L-4f		
577	L-4b	Baldwin	17966	7-1900	P&R*	7-1904	L-4d		
					P&R*	8-1905	L-4f		3-1928
578	L-4b	Baldwin	17967	7-1900	P&R*	5-1904	L-4a		
					P&R*	10-1905	L-4f		
					P&R*	5-1926	L-3sc		
579	L-4b	Baldwin	17968	7-1900	P&R*	8-1904	L-4d		
					P&R*	8-1905	L-4f		
					P&R*	12-1927	L-3se		
580	L-4b	Baldwin	18005	8-1900	P&R*	6-1904	L-4d		
					P&R*	10-1905	L-4f		
					P&R*	2-1929	L-3se		
Unclassified 4-6-0									
581	W&N	#12	Baldwin	1163	8-1863	18x22"	54"	80000	Sc. 11-1907
582	W&N	#14	P&R		1869	18x22"	54"	82000	3-1905
583	W&N	#13	Baldwin	1550	12-1866	18x22"	54"	80000	6-1909
584	W&N	#11	Baldwin	2283	11-1870	16x24"	54"	75000	3-1905
585	W&N	#19	Baldwin	13148	1-1893	19x24"	62"	116000	1-1912
586	W&N	#20	Baldwin	13867	12-1893	19x24"	62"	116000	1-1927
	L-5a		22x28" 68½"	200#	131200	171100	33635#		
	L-5b		21x28" 68½"	200#	124750	167325	30645		
	L-5sc		22x28" 68½"	200#	147550	186350	33630#		
587	L-5a	Baldwin	20816	8-1902	595	L-5a	Baldwin	20898	9-1902
588	L-5a	Baldwin	20817	8-1902	596	L-5a	Baldwin	20943	9-1902
589	L-5a	Baldwin	20825	8-1902	597	L-5a	Baldwin	22211	5-1903
590	L-5a	Baldwin	20826	8-1902	598	L-5a	Baldwin	22221	5-1903
591	L-5a	Baldwin	20827	8-1902	599	L-5a	Baldwin	22226	5-1903
592	L-5a	Baldwin	20828	8-1902	600	L-5a	Baldwin	22261	5-1903
593	L-5a	Baldwin	20881	8-1902	601	L-5a	Baldwin	22277	6-1903
594	L-5a	Baldwin	20897	8-1902					

All of the above engines were rebuilt to L-5b in 1905 and rebuilt to L-5sc 1917-1922. Nos. 593-597 were sold to the Central R. R. of N. J., 2 & 3-1936. All of the others are active.

	L-7a(W)	22x28" 68½"	210#	169800	213525	34475#		
	L-7b(W)	23x28" 68½"	205#	160800	213525	37680#		
	L-7sb(W)	22x28" 68½"	205#	169000	216640	37680#		
602	L-7a	Baldwin	26266	8-1905	610	L-7a	P&R	9-1910
603	L-7a	Baldwin	26280	8-1905	611	L-7a	P&R	9-1910
604	L-7a	Baldwin	26296	8-1905	612	L-7a	P&R	9-1910
605	L-7a	Baldwin	26319	9-1905	613	L-7a	P&R	9-1910
606	L-7a	P&R		8-1910	614	L-7a	P&R	9-1910
607	L-7a	P&R		8-1910	615	L-7a	P&R	9-1910
608	L-7a	P&R		8-1910	616	L-6sa	P&R*	1-1930
609	L-7a	P&R		8-1910	23x28" 68½"	220#	187175	
					235400	40435#		

All of the above engines were rebuilt to L-7b, 1917-18 and rebuilt to L-7sb 1920. No. 603 was renumbered 616 at time of rebuilding. No. 610 was Sc. 3-1936.

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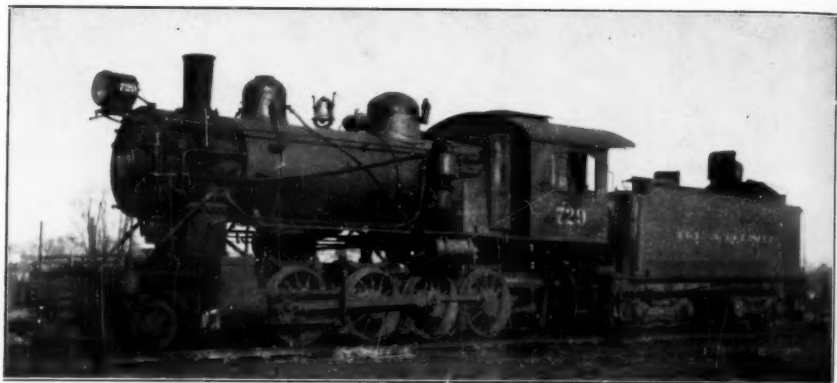
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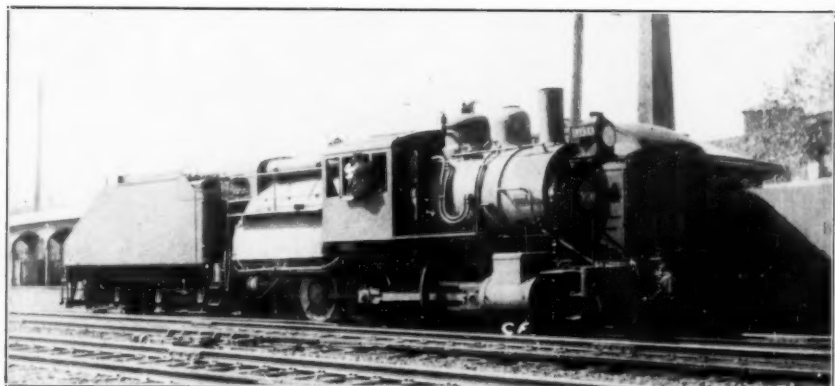
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Reading #729—I-3a, reb. Reading Shops, 1903, at Bridgeport, Pa.



—Courtesy of C. E. Fisher.

Reading #950—I-5c, reb. Reading Shops, 1903, at Wayne Jct., Pa.

	L-8b(W)	22x24"	68½"	200#	151175	199600	28830#				
	L-8d(W)	22x24"	68½"	200#	156600	195500	28830#				
	L-8se(W)	22x24"	68½"	200#	152900	198300	28800#				
651	L-8b	P&R	8-1911	P&R*	7-1914	L-8d	5-1924	L-8se	Sc.	4-1944	
651	L-8b	P&R	8-1911	P&R*	3-1915	L-8d	12-1924	L-8se		4-1944	
652	L-8b	P&R	8-1911	P&R*	9-1914	L-8d	6-1924	L-8se			
653	L-8b	P&R	8-1911	P&R*	2-1915	L-8d	5-1924	L-8se			
654	L-8b	P&R	8-1911	P&R*	9-1915	L-8d	7-1924	L-8se			
	L-10a(W)	(3)	19x24"	74"	240#	172600	226750	35825#			
	L-10b(W)		22x26"	74"	240#	169675	221500	34690#			
	L-10sb(W)		22x26"	74"	215#	167250	221050	31100#			
675	L-10a	P&R	6-1911	P&R*	7-1916	L-10b	7-1923	L-10sb			
676	L-10b	P&R	6-1911	P&R*	2-1923	L-10sb	205#	171625	220450	29600#	
	L-8a(W)		21x26"	68½"	200#	151025	196125	28455#			
	L-8sc(W)		22x26"	68½"	200#	161375	199800	31200#			
690	L-8a	P&R*		10-1912	696	L-8a	Baldwin	27979		4-1906	
691	L-8a	Baldwin	27931	4-1906	697	L-8a	Baldwin	28008		4-1906	
692	L-8a	Baldwin	27932	4-1906	698	L-8a	Baldwin	28016		4-1906	
693	L-8a	Baldwin	27933	4-1906	699	L-8a	Baldwin	28045		4-1906	
694	L-8a	Baldwin	27934	4-1906		Rebuilt & renumbered 690, 1912					
695	L-8a	Baldwin	27960	4-1906	700	L-8a	Baldwin	28112		5-1906	

All of the above were equipped with superheaters and reclassified 1921-8.

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	I-1a(W)	20x24"	50½"	120#	98300	113900	19390#				
	I-1b(W)	20x24"	50½"	120#	99500	114000	19390#				
	I-1c(W)	20x24"	50½"	120#	99500	114000	19390#				
	I-1d(W)	20x24"	50½"	150#	103500	120900	24235#				
	I-1e(W)	20x24"	50½"	150#	104100	119600	24235#				
	I-2e(W)	20½x24"	50"	175#	136675	154500	30005#				
	I-2f W)	20½x24"	50"	175#	135625	154400	30005#				
	I-3a	20x24"	50½"	200#	119400	137700	32315#				
701	483	I-1b	Baldwin	5570	4-1881				Sc.	7-1906	
701		I-2e	P&R		7-1906					3-1927	
702	413	I-1a	Baldwin	4921	1-1880					6-1909	
702		I-2f	P&R		8-1909					1-1931	
703	414	I-1a	Baldwin	4932	1-1880	P&R*	12-1904	I-3a		3-1934	
704	415	I-1a	Baldwin	4935	1-1880	P&R*	1-1905	I-3a		11-1933	
705	416	I-1a	Baldwin	4936	1-1880	P&R*	3-1903	I-3a		10-1928	
706	417	I-1a	Baldwin	4937	1-1880	P&R*	12-1902	I-3a		2-1937	
707	419	I-1a	Baldwin	4949	2-1880					8-1906	
707		I-2e	P&R		8-1906					10-1928	
708	420	I-1a	Baldwin	4952	2-1880					9-1906	
708		I-2e	P&R		9-1906					3-1935	
709	421	I-1a	Baldwin	4954	2-1880	P&R*	2-1903	I-3a		3-1934	
710	422	I-1a	Baldwin	4958	2-1880	P&R*	11-1905	I-3a		5-1933	
711	423	I-1a	Baldwin	4962	2-1880					6-1912	
712	424	I-1a	Baldwin	4965	2-1880	P&R*	10-1903	I-3a		10-1928	
713	425	I-1a	Baldwin	4969	2-1880					11-1906	
713		I-2e	P&R		11-1906					7-1934	
714	418	I-1d	P&R*		2-1899					11-1926	
715	426	I-1a	Baldwin	4970	2-1880	P&R*	4-1904	I-3a		Sold	
		Williamsport & North Branch Ry. #24								4-1926	
716	428	I-1a	Baldwin	4977	2-1880	P&R*	4-1903	I-3a		4-1934	
717	429	I-1a	Baldwin	4989	3-1880				Sc.	8-1909	
717		I-2f	P&R		8-1909					10-1930	
718	430	I-1a	Baldwin	4991	3-1880	P&R*	3-1903	I-3a		5-1934	
719	432	I-1a	Baldwin	5001						11-1906	
719		I-2e	P&R		11-1906					1-1936	

720	496	I-1a	Baldwin	5013	3-1880				1-1911
721	497	I-1a	Baldwin	5019	3-1880				2-1911
722	427	I-1d	P&R*		12-1898				6-1925
723	431	I-1d	P&R*		11-1898				9-1926
724	498	I-1a	Baldwin	5035	4-1880				9-1907
724		I-2f	P&R		9-1907				8-1933
725	499	I-1a	Baldwin	5036	4-1880				8-1909
725		I-2f	P&R		12-1909				8-1933
726	500	I-1a	Baldwin	5047	4-1880				12-1911
727	501	I-1a	Baldwin	5050	4-1880	P&R*	11-1902	I-3a	10-1925
728	502	I-1a	Baldwin	5065	4-1880	P&R*	3-1903	I-3a	11-1928
729	503	I-1a	Baldwin	5075	4-1880	P&R*	5-1903	I-3a	4-1934
730	66	I-1e	P&R*		2-1899				11-1926
731	73	I-1e	P&R		2-1899				6-1925
732	81	I-1e	P&R		1-1899				7-1934
733	53	I-1b	Baldwin	5564	3-1881				11-1906
733		I-2e	P&R		11-1906				1-1930
734	55	I-1b	Baldwin	5581	4-1881				10-1907
734		I-2f	P&R		10-1907				9-1934
735	62	I-1b	Baldwin	5552	3-1881				6-1909
735		I-2f	P&R		9-1909	Sold—Wmsport & N.Br. #23			1925
736	285	I-1b	Baldwin	5589	4-1881			Sc.	9-1907
736		I-2f	P&R		9-1907				9-1934
737	112	I-1b	Baldwin	5615	5-1881				6-1909
737		I-2f	P&R		9-1909				9-1934
738	114	I-1b	Baldwin	5625	5-1881	P&R*	11-1903	I-3a	9-1930
739	115	I-1b	Baldwin	5628	5-1881	P&R*	6-1902	I-3a	12-1933
740	125	I-1b	Baldwin	5632	5-1881				6-1909
740		I-2f	P&R		10-1909				2-1937
741	126	I-1b	Baldwin	5639	5-1881	P&R*	8-1901	I-1e	3-1929
742	110	I-1e	P&R*		8-1899				12-1933
743	127	I-1b	Baldwin	5647	5-1881				10-1906
743		I-2e	P&R		10-1906				3-1935
744	301	I-1b	Baldwin	5658	6-1881				12-1906
744		I-2e	P&R		12-1906				9-1923
745	302	I-1b	Baldwin	5659	6-1881	P&R*	5-1905	I-3a	3-1935
746	306	I-1b	Baldwin	5678	6-1881				10-1906
746		I-2e	P&R		10-1906			Sc.	11-1933
747	308	I-1b	Baldwin	5680	6-1881				10-1906
747		I-2e	P&R		12-1906				10-1927
748	300	I-1e	P&R*		1-1899				3-1929
749	310	I-1b	Baldwin	5699	6-1881				12-1906
749		I-2f	P&R		12-1906				6-1925
750	347	I-1b	Baldwin	5710	7-1881				6-1909
750		I-2f	P&R		10-1909				9-1926
751	367	I-1b	Baldwin	5711	7-1881	P&R*	1-1903	I-3a	2-1937
752	368	I-1b	Baldwin	5716	7-1881				12-1906
752		I-2f	P&R		12-1906				12-1926
753	369	I-1b	Baldwin	5723	7-1881				9-1907
753		I-2f	P&R		9-1907				10-1923
754	320	I-1e	P&R*		5-1899				7-1914
755	20	I-1b	Baldwin	5744	7-1881				6-1912
756	371	I-1b	Baldwin	5732	7-1881				3-1911
757	434	I-1b	P&R*		1-1898	P&R*	6-1911	I-1e	11-1926
758	447	I-1b	Baldwin	5738	7-1881	P&R*	7-1902	I-3a	11-1927
759	504	I-1b	Baldwin	6156	4-1882				6-1909
759		I-2f	P&R		10-1909				2-1931
760	505	I-1b	Baldwin	6154	4-1882	P&R*	5-1902	I-3a	8-1927
761	507	I-1b	Baldwin	6164	5-1882	P&R*	9-1902	I-3a	1-1926
762	508	I-1b	Baldwin	6166	4-1882				6-1909
762		I-2f	P&R		11-1909				9-1930
763	509	I-1b	Baldwin	6200	5-1882				9-1907

763		I-2f	P&R		9-1907				10-1927
764	510	I-1b	P&R		5-1897	P&R*	6-1911	I-1e	1-1934
765	511	I-1b	Baldwin	6213	5-1882	P&R*	6-1902	I-3a	
766	512	I-1b	Baldwin	6214	5-1882	P&R*	1-1904	I-3a	4-1934
767	515	I-1b	Baldwin	6237	6-1882				1-1907
767		I-2f	P&R		1-1907				2-1931
768	516	I-1b	Baldwin	6241	6-1882	P&R*	9-1903	I-3a	9-1928
769	517	I-1b	Baldwin	6242	6-1882	P&R*	8-1905	I-3a	11-1926
770	519	I-1b	Baldwin	6255	6-1882				8-1909
770		I-2f	P&R		12-1909				10-1926
771	520	I-1b	Baldwin	6259	6-1882				1-1907
771		I-2f	P&R		1-1907				10-1926
772	513	I-1e	P&R*		12-1898				1-1927
773	514	I-1e	P&R*		12-1898				10-1929
774	518	I-1e	P&R*		1-1899				9-1924
775	521	I-1b	Baldwin	6274	7-1882				6-1909
775		I-2f	P&R		11-1909				9-1925
776	522	I-1b	Baldwin	6278	7-1882				1-1907
776		I-2f	P&R		1-1907				1-1930
777	523	I-1b	Baldwin	6295	7-1882				6-1909
777		I-2f	P&R		11-1909				8-1934
778	524	I-1b	Baldwin	6299	7-1882				1-1907
778		I-2f	P&R		1-1907				6-1926
779	525	I-1b	Baldwin	6302	7-1882				3-1912
780	526	I-1b	Baldwin	6306	7-1882				12-1905
780		I-2f	P&R		2-1907				10-1935
781	527	I-1b	Baldwin	6310	7-1882	P&R*	1-1906	I-3a	12-1926
782	528	I-1b	Baldwin	6309	7-1882				3-1912
783	529	I-1b	Baldwin	6329	8-1882				6-1909
783		I-2f	P&R		12-1909				8-1929
784	530	I-1b	Baldwin	6332	8-1882				2-1907
784		I-2f	P&R		2-1907				1-1928
785	362	I-1b	Baldwin	6352	8-1882				2-1907
785		I-2f	P&R		2-1907				2-1928
786	531	I-1b	Baldwin	6340	8-1882				2-1907
786		I-2f	P&R		2-1907				2-1926
787	532	I-1b	Baldwin	6341	8-1882				8-1909
787		I-2f	P&R		12-1909				10-1930
788	82	I-1b	Baldwin	6356	9-1882				9-1907
788		I-2f	P&R		9-1907				6-1929
789	533	I-1c	Baldwin	6834	7-1883	P&R*	2-1905	I-3a	11-1926
790	534	I-1c	Baldwin	6833	7-1883				9-1914
791	535	I-1e	P&R*		11-1898				2-1928
792	536	I-1e	P&R*		12-1898				7-1928
793	537	I-1c	Baldwin	6865	7-1883				9-1914
794	538	I-1c	Baldwin	6859	7-1883				6-1909
794		I-2f	P&R		12-1909				4-1925
795	539	I-1c	Baldwin	6872	8-1883				8-1909
795		I-2f	P&R		12-1909				7-1928
796	540	I-1c	Baldwin	6870	7-1883				6-1909
796		I-2f	P&R		1-1910				10-1935
797	541	I-1c	Baldwin	6877	8-1883				2-1907
797		I-2f	P&R		2-1907				8-1934
798	542	I-1c	Baldwin	6881	8-1883				3-1907
798		I-2f	P&R		3-1907				10-1926
799	857	I-1e	P&R*		12-1898				4-1924
800	858	I-1c	Baldwin	6976	10-1883				3-1907
800		I-2f	P&R		3-1907				10-1929
801	859	I-1c	Baldwin	6993	10-1883				10-1912
802	860	I-1c	Baldwin	6999	10-1883				6-1909
802		I-2f	P&R		1-1910				10-1926

803	861	I-1c	Baldwin	7027	11-1883	P&R*	7-1903	I-3a	9-1930
804	863	I-1c	Baldwin	7076	12-1883				3-1907
804		I-2f	P&R		3-1907				10-1940
805	864	I-1c	Baldwin	7078	12-1883				3-1907
805		I-2f	P&R		3-1907				9-1925
806	865	I-1c	Baldwin	7109	1-1884				5-1916
807	866	I-1c	Baldwin	7113	1-1884				4-1907
807		I-2f	P&R		4-1907				9-1926
808	867	I-1c	Baldwin	7141	1-1884				4-1912
809	868	I-1e	P&R*		12-1898				12-1933
810	869	I-1c	Baldwin	7163	2-1884				9-1914
811	870	I-1c	Baldwin	7174	2-1884				2-1913
812	871	I-1e	P&R*		10-1899				3-1934
813	872	I-1c	Baldwin	7183	2-1884				2-1915
814	873	I-1c	Baldwin	7185	2-1884	P&R*	12-1902	I-3a	1-1926
815	874	I-1c	Baldwin	7188	2-1884				10-1907
815		I-2f	P&R		10-1907	Sold—Wmsport. & N.Br.	#25		1934
816	875	I-1c	Baldwin	7194	2-1884				7-1912
817	876	I-1e	P&R*		1-1895				12-1929
818	877	I-1c	Baldwin	7207	3-1884	P&R*	3-1902	I-3a	3-1929
819	878	I-1e	P&R*		8-1897				11-1933
820	879	I-1e	P&R*		11-1899				10-1920
821	880	I-1c	Baldwin	7218	3-1884				6-1909
822	881	I-1c	Baldwin	7227	3-1884				9-1912
823	882	I-1c	Baldwin	7232	3-1884	P&R*	11-1904	I-3a	2-1934
824	883	I-1e	P&R*		5-1899				9-1923
825	884	I-1c	Baldwin	7246	4-1884				10-1907
825		I-2f	P&R		10-1907				12-1925
826	885	I-1c	Baldwin	7250	4-1884				5-1907
826		I-2f	P&R		5-1907				9-1925
827	886	I-1c	Baldwin	7253	4-1884				8-1909
827		I-2f	P&R		12-1909				6-1927
828	887	I-1e	P&R*		10-1899				12-1925
829	888	I-1c	Baldwin	7271	4-1884				8-1909
829		I-2f	P&R		12-1909				5-1929
830	889	I-1c	Baldwin	7284	4-1884				3-1912
831	890	I-1e	P&R*		1-1899				1-1934
832	891	I-1c	Baldwin	7292	5-1884				4-1907
832		I-2f	P&R		4-1907				10-1925
833	905	I-1c	Baldwin	8011	6-1886				5-1907
833		I-2f	P&R		5-1907				2-1929
834	906	I-1c	Baldwin	8012	6-1886			Sc.	10-1912
835	907	I-1c	Baldwin	8016	7-1886				6-1909
836	908	I-1c	Baldwin	8020	7-1886				9-1926
837	909	I-1c	Baldwin	8025	7-1886				10-1907
837		I-2f	P&R		10-1907				2-1937

		I-2a(W)	20x24"	50½"	145#	104500	120000	24235#	
		I-2b(W)	20x24"	50½"	145#	104500	120000	24235#	
		I-2c(W)	20x24"	50½"	145#	105500	121700	24235#	
		I-2d	20x24"	50½"	145#	105500	121700	24235#	
		I-2f(W)	20½x24"	50"	175#	135625	154400	30005#	
838	910	I-2a	Baldwin	9003	1-1888				Sc. 10-1915
839	912	I-2a	Baldwin	8977	12-1887				7-1916
840	913	I-2a	Baldwin	8978	12-1887				3-1914
841	914	I-2a	Baldwin	8988	1-1888				5-1917
842	915	I-2a	Baldwin	8989	1-1888				2-1917
843	911	I-2b	P&R*		6-1899				6-1925
844	916	I-2a	Baldwin	9010	1-1888				8-1922
845	917	I-2a	Baldwin	9008	1-1888				8-1914

846	918	1-2a	Baldwin	9031	1-1888		4-1916
847	919	1-2a	Baldwin	9032	1-1888		8-1921
848	920	1-2a	Baldwin	9047	2-1888		12-1913
849	921	1-2a	Baldwin	9048	2-1888		7-1924
850	922	1-2a	Baldwin	9070	2-1888		4-1916
851	923	1-2a	Baldwin	9071	2-1888		2-1916
852	924	1-2a	Baldwin	9076	2-1888		2-1930
853	925	1-2a	Baldwin	9085	2-1888		4-1916
854	927	1-2a	Baldwin	9098	3-1888		11-1915
855	928	1-2a	Baldwin	9099	3-1888		9-1912
856	929	1-2a	Baldwin	9105	3-1888		9-1915
857	930	1-2a	Baldwin	9113	3-1888		2-1917
858	931	1-2a	Baldwin	9118	3-1888		10-1924
859	932	1-2a	Baldwin	9131	3-1888		2-1916
860	935	1-2a	Baldwin	9385	8-1888		2-1917
861	936	1-2a	Baldwin	9382	7-1888		10-1907
861		1-2f	P&R		10-1907		11-1929
862	937	1-2a	Baldwin	9386	8-1888		2-1927
863	938	1-2a	Baldwin	9420	8-1888		11-1914
864	939	1-2a	Baldwin	9421	8-1888		1-1926
865	940	1-2a	Baldwin	9422	8-1888		6-1913
866	941	1-2a	Baldwin	9425	8-1888		9-1920
867	942	1-2a	Baldwin	9426	8-1888		8-1917
868	943	1-2a	Baldwin	9429	8-1888	Sold—1923 to Harleigh & Brook-wood Coal Co.	
869	944	1-2b	P&R*		8-1894		5-1916
870	945	1-2b	Baldwin	9424	8-1888		7-1916
871	946	1-2b	P&R*		2-1895		10-1915
872	947	1-2b	P&R*		7-1894		1-1927
873	948	1-2b	P&R*		5-1894		5-1918
874	949	1-2b	P&R*		10-1895		7-1923
875	950	1-2b	P&R*		1-1896		6-1925
876	579	1-2c	Baldwin	10820	4-1890		9-1927
877	580	1-2c	Baldwin	10821	4-1890		8-1917
878	581	1-2c	Baldwin	10816	4-1890		5-1918
879	582	1-2c	Baldwin	10817	4-1890		2-1907
879		1-2f	P&R		2-1907		8-1929
880	583	1-2c	Baldwin	10822	4-1890		5-1923
881	584	1-2c	Baldwin	10823	4-1890		11-1914
882	586	1-2c	Baldwin	10824	4-1890		12-1915
883	587	1-2c	Baldwin	10829	4-1890		4-1921
884	926	1-2b	P&R*		6-1892		3-1912
885	585	1-2c	Baldwin	10899	5-1890		1-1928
886	935	1-2d	Baldwin	9135	3-1888	P&R* 12-1904 1-3a	11-1926
887	934	1-2d	Baldwin	9379	7-1888		2-1917

1-4a(W)	14&24x26"	55½"	175#	127000	146000	22515#
1-4b(W)	14&24x26"	55½"	175#	127000	146000	22515#
1-4d(W)	22x26"	55½"	175#	130800	147400	33725#

888	634	1-4a	Baldwin	12999	10-1892	P&R*	6-1903	Re. 1423	12-1917
889	635	1-4a	Baldwin	13000	10-1892	P&R*	6-1902	1412	12-1916
890	636	1-4a	Baldwin	13007	10-1892	P&R*	12-1902	1413	12-1916
891	637	1-4a	Baldwin	13008	10-1892	P&R*	9-1903	1411	11-1916
892	638	1-4a	Baldwin	13012	11-1892	P&R*	3-1904	1421	8-1917
893	639	1-4a	Baldwin	13019	11-1892	P&R*	10-1904	1429	5-1922
894	640	1-4a	Baldwin	13028	11-1892	P&R*	7-1902	1416	5-1917
895	641	1-4a	Baldwin	13023	11-1892	P&R*	11-1902	1415	12-1916
896	642	1-4a	Baldwin	13029	11-1892	P&R*	9-1902	1410	7-1916
897	643	1-4a	Baldwin	13032	11-1892	P&R*	11-1902	1414	12-1916
898	644	1-4b	Baldwin	13069	12-1892	P&R*	4-1902	1417	6-1917

899	645	1-4b	Baldwin	13070	12-1892	P&R*	4-1903	1422	11-1917
900	646	1-4b	Baldwin	13088	12-1892	P&R*	12-1904	1418	6-1917
901	647	1-4b	Baldwin	13098	12-1892	P&R*	10-1904	1433	7-1922
902	648	1-4b	Baldwin	13107	12-1892	P&R*	8-1904	1424	3-1921
903	649	1-4b	Baldwin	13127	12-1892	P&R*	2-1905	Re 1419	7-1917
904	650	1-4b	Baldwin	13125	12-1892	P&R*	11-1903	1-4d	Sc. 2-1937
905	651	1-4b	Baldwin	13126	12-1892	P&R*	10-1904	1-4d	12-1933
906	652	1-4b	Baldwin	13143	1-1893	P&R*	8-1904	Re 1425	6-1921
907	653	1-4b	Baldwin	13144	1-1893	P&R*	11-1903	1420	7-1917
908	654	1-4b	Baldwin	13161	1-1893	P&R*	5-1903	1-4d	Sc 3-1935
909	655	1-4b	Baldwin	13162	1-1893	P&R*	6-1902	1-4d	6-1936
910	656	1-4b	Baldwin	13185	1-1893	P&R*	5-1903	1-4d	
911	657	1-4b	Baldwin	13178	1-1893	P&R*	1-1903	Re 1437	10-1922
912	658	1-4b	Baldwin	13184	1-1893	P&R*	8-1904	1-4d	Sc 2-1937
913	659	1-4b	Baldwin	13192	1-1893	P&R*	9-1904	1-4d	10-1935
914	660	1-4b	Baldwin	13199	2-1893	P&R*	2-1903	1-4d	4-1934
915	661	1-4b	Baldwin	13200	2-1893	P&R*	10-1904	Re —	12-1921
916	662	1-4b	Baldwin	13202	2-1893	P&R*	3 1903	1-4d	Sc 10-1940
917	663	1-4b	Baldwin	13203	2-1893	P&R*	7-1903	1-4d	
918	664	1-4b	Baldwin	13204	2-1893	P&R*	10-1903	1-4d	Sc 2-1937
919	665	1-4b	Baldwin	13230	2-1893	P&R*	3-1905	1-4d	10-1940
920	666	1-4b	Baldwin	13229	2-1893	P&R*	9-1902	1-4d	11-1934
921	667	1-4b	Baldwin	13234	2-1893	P&R*	10-1902	Re 1434	8-1922
922	668	1-4b	Baldwin	13243	2-1893	P&R*	4-1904	1-4d	
923	669	1-4b	Baldwin	13301	3-1893	P&R*	8-1903	1-4d	Sc 10-1935
924	670	1-4b	Baldwin	13302	3-1893	P&R*	11-1904	Re 1431	5-1922
925	671	1-4b	Baldwin	13312	3-1893	P&R*	10-1903	1-4d	Sc 11-1933
926	672	1-4b	Baldwin	13317	3-1893	P&R*	11-1904	Re 1436	7-1922
927	673	1-4b	Baldwin	13307	3-1893	P&R*	10-1903	1-4d	Sc 5-1932
928	675	1-4b	Baldwin	13330	3-1893	P&R*	12-1904	1-4d	2-1937
929	676	1-4b	Baldwin	13342	4-1893	P&R*	9-1904	1-4d	11-1932
930	677	1-4b	Baldwin	13345	4-1893	P&R*	10-1902	Re 1426	7-1921
931	678	1-4b	Baldwin	13346	4-1893	P&R*	9-1903	1-4d	Sc. 3-1935
932	674	1-4b	Baldwin	13329	3-1893	P&R*	9-1904	1-4d	2-1937
933	365	1-4b	Baldwin	15039	9-1896	P&R*	11-1902	1-4d	3-1935
934	459	1-4b	Baldwin	15040	9-1896	P&R*	7-1904	1-4d	2-1937
935	467	1-4b	Baldwin	15041	9-1896	P&R*	9-1902	1-4d	3-1935
936	472	1-4b	Baldwin	15042	9-1896	P&R*	11-1905	Re 1428	2-1922
937	495	1-4b	Baldwin	15043	9-1896	P&R*	5-1905	1432	5-1922

All class 1-4a and 1-4b locomotives were rebuilt to class 1-4d locomotives on the dates shown. Those that were renumbered in the 1400 series and rebuilt to eight wheel switchers are indicated and the date is the date of rebuilding and renumbering.

		1-5a	22x28"	50½"	145#	131800	147300	33075#	
		1-5b	22x28"	50½"	145#	131600	146700	33075#	
		1-5c	22x28"	50½"	175#	136600	151000	39920#	
First		1-6a	14&24x26"	50½"	175#	131000	149000	—	
All wide firebox									
938	588	1-5b	Baldwin	10808	4-1890	P&R*	10-1912		Sc. 8-1934
939	589	1-5b	Baldwin	10810	4-1890	P&R*	7-1913		
940	590	1-5b	Baldwin	10809	4-1890	P&R*	10-1906		2-1937
941	592	1-5b	Baldwin	10813	4-1890	P&R*	8-1915		9-1934
942	591	1-5b	Baldwin	10826	4-1890	P&R*	8-1917		2-1937
943	593	1-5b	Baldwin	10827	4-1890				7-1914
944	954	1-5a	P&R*		7-1891				6-1936
945	955	1-5a	P&R*		2-1892				2-1937
946	952	1-5a	P&R*		3-1892				
947	953	1-5a	P&R*		3-1892				3-1935
948	951	1-5a	Baldwin*		3-1892				3-1935

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—Courtesy of C. E. Fisher.

Reading #963—1-7a, Baldwin, 1898, at Camden, N. J.



Reading #1149—A-Sa, Reading Shops, 1913, at Reading, Pa.

949	956	1-5a	P&R*	5-1892			10-1940
950	598	1-6a	Baldwin	12351	12-1891	P&R* 8-1903	1-5c 6-1936
951	590	1-6a	Baldwin	12354	12-1891	P&R* 10-1902	1-5c 10-1940
952	600	1-6a	Baldwin	12359	12-1891	P&R* 1-1903	1-5c 10-1940
953	601	1-6a	Baldwin	12364	12-1891	P&R* 5-1903	1-5c 4-1928
954	602	1-6a	Baldwin	12365	12-1891	P&R* 8-1903	1-5c 7-1934
955	603	1-6a	Baldwin	12366	12-1891	P&R* 3-1904	1-5c 2-1937
956	604	1-6a	Baldwin	12368	12-1891	P&R* 10-1903	1-5c 11-1933
957	605	1-6a	Baldwin	12369	12-1891	P&R* 1-1903	1-5c 12-1934
958	606	1-6a	Baldwin	12373	12-1891	P&R* 9-1903	1-5c 6-1936
959	607	1-6a	Baldwin	12374	12-1891	P&R* 1-1904	1-5c 5-1941
960	183	1-6a	Baldwin	12725	6-1892	P&R* 6-1904	1-5c 6-1934

Second	1-6a	22x28"	55½"	185#	169225	188225	38400#
	1-7a	22x28"	56"	180#	145000	163000	37025#
	1-7b	22x28"	56"	180#	145000	165000	37025#
	1-7c	22x28"	56"	200#	145000	166000	41140#
	1-7d	22x28"	56"	200#	145000	166000	41140#
	1-7j	21x28"	55½"	200#	152650	167300	37850#
	1-7k	21x28"	55½"	200#	144150	166000	37850#
	1-7l	21x28"	55½"	200#	145425	163875	37850#
	1-7m	21x28"	55½"	200#	148000	166650	37850#

961	11	1-7a	Baldwin	16414	12-1898	Sold—Ironton R. R.	#30, 2-1923
962	37	1-7a	Baldwin	16415	12-1898		Sc. 3-1934
963	102	1-7a	Baldwin	16416	12-1898		11-1928
964	124	1-7a	Baldwin	16417	12-1898	P&R* 4-1905	1-7j 3-1934
965	133	1-7a	Baldwin	16418	12-1898		10-1928
966	136	1-7a	Baldwin	16419	12-1898	P&R* 5-1905	1-7j 4-1934
967	173	1-7a	Baldwin	16420	12-1898		12-1934
968	188	1-7a	Baldwin	16421	12-1898	Sold—Ironton R. R.	#33, 9-1923
969	192	1-7a	Baldwin	16422	12-1898		Sc. 3-1935
970	212	1-7a	Baldwin	16423	12-1898		10-1928
971	217	1-7a	Baldwin	16500	2-1899		3-1934
972	249	1-7a	Baldwin	16501	2-1899		
973	254	1-7a	Baldwin	16502	2-1899	Sold—Ironton R. R.	#32, 7-1923
974	274	1-7a	Baldwin	16503	2-1899	Sold—Ironton R. R.	#31, 4-1923
975	278	1-7a	Baldwin	16504	2-1899		Sc. 2-1934
976	317	1-7a	Baldwin	16505	2-1899		4-1934
977	340	1-7a	Baldwin	16506	2-1899	P&R* 4-1905	1-7j 10-1935
978	343	1-7a	Baldwin	16507	2-1899	BLW* 4-1905	1-6a
						Renumbered 1101	2-1906
979	344	1-7a	Baldwin	16508	2-1899	P&R* 4-1905	1-7j 4-1929
980	360	1-7a	Baldwin	16509	2-1899	Sold—Ironton R. R.	#34, 3-1924
981	—	1-7c	Baldwin	18135	9-1900	P&R* 6-1905	1-7l 6-1936
982	—	1-7c	Baldwin	18136	9-1900	P&R* 12-1905	1-7l
983	—	1-7c	Baldwin	18141	9-1900	P&R* 7-1905	1-7l 7-1934
984	—	1-7c	Baldwin	18142	9-1900	P&R* 10-1905	1-7l 6-1926
985	—	1-7c	Baldwin	18143	9-1900	P&R* 8-1906	1-7l
986	—	1-7c	Baldwin	18144	9-1900	P&R* 3-1905	1-7l 3-1935
987	—	1-7c	Baldwin	18175	9-1900	P&R* 12-1905	1-7l 7-1934
988	—	1-7c	Baldwin	18176	9-1900	P&R* 8-1905	1-7l 2-1937
989	—	1-7c	Baldwin	18259	10-1900	P&R* 6-1905	1-7l 7-1934
990	—	1-7c	Baldwin	18260	10-1900	P&R* 10-1905	1-7l 3-1935
991	6	1-7b	Baldwin	17096	10-1899		8-1927
992	75	1-7b	Baldwin	17097	10-1899		1-1928
993	83	1-7b	Baldwin	17098	10-1899	P&R* 3-1905	1-7k 12-1926
994	84	1-7b	Baldwin	17099	10-1899		4-1934
995	107	1-7b	Baldwin	17100	10-1899	P&R* 3-1905	1-7k 3-1935
995	—	1-7k				P&R* 3-1907	1-7b
996	122	1-7b	Baldwin	17101	10-1899	BLW* 4-1905	1-6a 2-1906
						Renumbered 1102	

997	128	1-7b	Baldwin	17144	10-1899				4-1934
998	137	1-7b	Baldwin	17145	10-1899				2-1937
999	146	1-7b	Baldwin	17146	10-1899				12-1928
1000	154	1-7b	Baldwin	17147	10-1899				3-1935
1001	179	1-7b	Baldwin	17148	10-1899				9-1933
1002	182	1-7b	Baldwin	17149	10-1899	P&R*	4-1905	1-7k	8-1926
1003	186	1-7b	Baldwin	17150	10-1899				4-1934
1004	189	1-7b	Baldwin	17151	10-1899				
1005	193	1-7b	Baldwin	17152	10-1899				4-1934
1006	197	1-7b	Baldwin	17153	10-1899				9-1933
1007	198	1-7b	Baldwin	17154	10-1899				Sc. 10-1926
1008	200	1-7b	Baldwin	17155	10-1899				10-1935
1009	202	1-7b	Baldwin	17156	10-1899				9-1933
1010	205	1-7b	Baldwin	17334	1-1900				11-1933
1011	208	1-7b	Baldwin	17335	1-1900				2-1933
1012	228	1-7b	Baldwin	17336	1-1900				
1013	245	1-7b	Baldwin	17337	1-1900	BLW*	4-1905	1-6a	
						Renumbered	1103		
1014	296	1-7b	Baldwin	17338	1-1900	P&R*	3-1905	1-7k	2-1906
1015	311	1-7b	Baldwin	17348	1-1900				6-1936
1016	387	1-7b	Baldwin	17349	1-1900				1-1929
1017	397	1-7b	Baldwin	17350	1-1900				2-1937
1018	488	1-7b	Baldwin	17351	1-1900				4-1934
1019	543	1-7b	Baldwin	17352	1-1900				1-1927
1020	862	1-7b	Baldwin	17380	1-1900				3-1935
									10-1940
1021	W&N #15	Uncl.	Baldwin	8367	2-1887	2-8-0	20x24	50"	117400 Sc. 12-1923
1022	W&N #10	Uncl.	P&R*		2-1899	2-8-0	22x28"	50"	154250 2-1927
1023	1-7c	Baldwin	18671	2-1901	P&R*	5-1905	1-7i	Sc.	3-1935
1024	1-7c	Baldwin	18672	2-1901	P&R*	2-1906	1-7i		
1025	1-7c	Baldwin	18688	2-1901	P&R*	1-1906	1-7i		
1026	1-7c	Baldwin	18689	2-1901	P&R*	6-1905	1-7i		
1027	1-7c	Baldwin	18690	2-1901	P&R*	5-1905	1-7i		8-1926
1028	1-7c	Baldwin	18691	2-1901	P&R*	8-1905	1-7i		
1029	1-7c	Baldwin	18728	3-1901	P&R*	4-1905	1-7i		6-1934
1030	1-7c	Baldwin	18729	3-1901	P&R*	12-1905	1-7i		7-1934
1031	1-7c	Baldwin	18768	3-1901	P&R*	7-1906	1-7i		12-1926
1032	1-7c	Baldwin	18769	3-1901	P&R*	8-1905	1-7i		10-1935
1033	1-7c	Baldwin	18813	3-1901	P&R*	9-1905	1-7i		3-1935
1034	1-7c	Baldwin	18814	3-1901	P&R*	5-1905	1-7i		6-1935
1035	1-7c	Baldwin	18840	3-1901	P&R*	9-1905	1-7i		7-1934
1036	1-7c	Baldwin	18841	3-1901	P&R*	6-1905	1-7i		2-1937
1037	1-7c	Baldwin	18842	3-1901	P&R*	2-1906	1-7i		12-1936
1038	1-7c	Baldwin	18843	3-1901	P&R*	7-1905	1-7i		10-1940
1039	1-7c	Baldwin	18852	3-1901	BLW*	3-1905	1-6b	Re 1108	
					2-1906				
1040	1-7c	Baldwin	18853	3-1901	P&R*	8-1905	1-7i		4-1926
1041	1-7c	Baldwin	18788	3-1901	P&R*	5-1905	1-7i		8-1934
1042	1-7c	Baldwin	18789	3-1901	P&R*	11-1905	1-7i		3-1935
1043	1-7c	Baldwin	18838	3-1901	P&R*	3-1906	1-7i		
1044	1-7c	Baldwin	19139	6-1901	P&R*	12-1905	1-7i		10-1940
1045	1-7c	Baldwin	19140	6-1901	P&R*	3-1905	1-7i		
1046	1-7c	Baldwin	19141	6-1901	P&R*	3-1905	1-7i	Sc.	9-1926
1047	1-7c	Baldwin	19142	6-1901	P&R*	10-1905	1-7i		10-1940
1048	1-7c	Baldwin	19143	6-1901	P&R*	5-1905	1-7i		10-1940
1049	1-7c	Baldwin	19177	6-1901	P&R*	5-1905	1-7i		10-1935
1050	1-7c	Baldwin	19178	7-1901	P&R*	4-1905	1-7i		8-1926
1051	1-7c	Baldwin	19216	7-1901	P&R*	4-1905	1-7i		11-1926
1052	1-7c	Baldwin	19217	7-1901	P&R*	11-1905	1-7i		2-1937

1053	1-7c	Baldwin	19239	7-1901	P&R*	12-1905	1-71	3-1935
1054	1-7c	Baldwin	19240	7-1901	P&R*	11-1905	1-71	2-1937
1055	1-7c	Baldwin	19295	7-1901	BLW*	4-1905	1-6b	Re. 1109,
					2-1906			
1056	1-7c	Baldwin	19296	7-1901	P&R*	5-1905	1-71	
1057	1-7c	Baldwin	19297	7-1901	P&R	4-1905	1-71	
1058	1-7c	Baldwin	19241	7-1901	BLW*	3-1905	1-6b	Re. 1110,
					3-1906			
1059	1-7c	Baldwin	19242	7-1901	P&R*	3-1905	1-71	
1060	1-7c	Baldwin	19265	7-1901	P&R*	5-1905	1-71	10-1940
1061	1-7c	Baldwin	19266	7-1901	P&R*	11-1905	1-71	8-1936
1062	1-7c	Baldwin	19267	7-1901	P&R*	12-1905	1-71	3-1935
1063	1-7c	Baldwin	19268	7-1901	P&R*	10-1905	1-71	
1064	1-7c	Baldwin	19269	7-1901	P&R*	3-1906	1-71	
1065	1-7c	Baldwin	19305	8-1901	P&R*	11-1905	1-71	10-1940
1066	1-7c	Baldwin	19306	8-1901	P&R*	10-1905	1-71	
1067	1-7c	Baldwin	19307	8-1901	P&R*	1-1906	1-71	5-1934
1068	1-7c	Baldwin	19323	8-1901	P&R*	2-1906	1-71	
1069	1-7c	Baldwin	19324	8-1901	P&R*	3-1905	1-71	8-1926
1070	1-7c	Baldwin	19325	8-1901	P&R*	10-1906	1-71	
1071	1-7c	Baldwin	19326	8-1901	P&R*	3-1905	1-71	8-1929
1072	1-7c	Baldwin	19327	8-1901	P&R*	4-1905	1-71	3-1935
1073	1-7d	Baldwin	21056	10-1902	P&R*	12-1905	1-7m	10-1935
1074	1-7d	Baldwin	21057	10-1902	P&R*	2-1906	1-7m	8-1934
1075	1-7d	Baldwin	21058	10-1902	P&R*	8-1905	1-7m	
1076	1-7d	Baldwin	21059	10-1902	P&R*	2-1906	1-7m	8-1934
1077	1-7d	Baldwin	21148	10-1902	P&R*	7-1906	1-7m	3-1935
1078	1-7d	Baldwin	21149	10-1902	P&R*	9-1905	1-7m	
1079	1-7d	Baldwin	21162	10-1902	P&R*	12-1905	1-7m	11-1933
1080	1-7d	Baldwin	21163	10-1902	P&R*	5-1905	1-7m	7-1936
1081	1-7d	Baldwin	21174	10-1902	P&R*	6-1906	1-7m	7-1934
1082	1-7d	Baldwin	21209	11-1902	P&R*	2-1906	1-7m	12-1926
1083	1-7d	Baldwin	21837	3-1903	P&R*	10-1906	1-7m	
1084	1-7d	Baldwin	21871	3-1903	P&R*	3-1905	1-7m	3-1935
1085	1-7d	Baldwin	21888	3-1903	P&R*	3-1905	1-7m	3-1935
1086	1-7d	Baldwin	21907	4-1903	P&R*	6-1906	1-7m	11-1934
1087	1-7d	Baldwin	22010	4-1903	P&R*	8-1905	1-7m	8-1934
1088	1-7d	Baldwin	22017	4-1903	P&R*	4-1905	1-7m	Sc. 7-1926
1089	1-7d	Baldwin	22034	4-1903	P&R*	10-1905	1-7m	10-1926
1090	1-7d	Baldwin	22042	4-1903	P&R*	4-1905	1-7m	9-1926
1091	1-7d	Baldwin	22085	4-1903	P&R*	8-1905	1-7m	
1092	1-7d	Baldwin	22086	5-1903	P&R*	8-1906	1-7m	
1093	1-7d	Baldwin	22128	5-1903	P&R*	11-1905	1-7m	10-1935
1094	1-7d	Baldwin	22129	5-1903	P&R*	11-1905	1-7m	
1095	1-7d	Baldwin	22137	5-1903	P&R*	4-1905	1-7m	
1096	1-7d	Baldwin	22160	5-1903	P&R*	3-1906	1-7m	10-1935
1097	1-7d	Baldwin	22176	5-1903	P&R*	5-1905	1-7m	10-1926

Second	1-6a	22x28"	55 $\frac{1}{2}$ "	185#	169225	188225	38400#
	1-6b	22x28"	55 $\frac{1}{2}$ "	185#	171475	183975	38400#
	1-6c&d	22x28"	55"	190#	177725	202400	39795#

All wide firebox

1101	978	1-6a	Baldwin*	4-1905		Sc.	10-1935
1102	996	1-6a	Baldwin*	4-1905			3-1935
1103	1013	1-6a	Baldwin*	4-1905			10-1940
1108	1039	1-6b	Baldwin*	3-1905			3-1935
1109	1055	1-6b	Baldwin*	4-1905			10-1935
1110	1058	1-6b	Baldwin*	3-1905			2-1937
1111	1-6c	BLW 29875	1-1907	Sc. 3-1935	1119	1-6c	BLW 29963 1-1907 Sc. 5-1941
1112	1-6c	BLW 29876	1-1907	5-1941	1120	1-6c	BLW 29972 1-1907 3-1935

1113	1-6c	BLW	29877	1-1907	5-1941	1121	1-6c	BLW	30008	1-1907	3-1935
1114	1-6c	BLW	29878	1-1907	5-1941	1122	1-6c	BLW	30009	1-1907	6-1936
1115	1-6c	BLW	29879	1-1907		1123	1-6c	BLW	30030	1-1907	5-1941
1116	1-6c	BLW	29940	1-1907	5-1936	1124	1-6c	BLW	30064	1-1907	5-1941
1117	1-6c	BLW	29941	1-1907	10-1940	1125	1-6c	BLW	30155	2-1907	6-1935
1118	1-6c	BLW	29962	1-1907	3-1935						

All 1-6c engines altered to 1-6d, 1921-1924.

2-10-0

	J-1sa(W)	25x28"	52"	180#	183500	208400	51490#	
1126	USA	1101	Baldwin	47366	12-1917	Sc.	3-1935	
1127		1102	Baldwin	47367	12-1917		3-1935	
1128		1103	Baldwin	47368	12-1917		3-1935	
1129		1162	Baldwin	48016	3-1918		3-1935	

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	A-5a(W)	18x24"	50"	185#	110450	110450	24455#				
1147-1150	P&R		4-1913		1161	P&R		3-1910			
1151-1155	P&R		4-1912		1162-1164	P&R		2-1910			
1156-1160	P&R		2-1910		1165	P&R		3-1910			
	1155 retired 7-1929										
1166-1168	Baldwin	30288-300	2-1907		1175	Baldwin	30723	4-1907			
1169-1170	Baldwin	30336-337	3-1907		1176-1177	Baldwin	30852-53	5-1907			
	Baldwin	30421	3-1907		1178-1179	Baldwin	30871-72	5-1907			
1172	Baldwin	30476	3-1907		1180	Baldwin	31014	6-1907			
1173	Baldwin	30518	3-1907		1181-1184	Baldwin	27333-36	1-1906			
1174	Baldwin	30710	4-1907								
	A-4a(W)	16x24"	44"	200#	98200	98200	23740#				
	A-4b(W)	16x24"	50"	200#	104800	104800	20890#				
	All built by Baldwin										
1187	A-4a	21831	3-1903	A-4b	10-1906	1194	A-4a	21913	4-1903	A-4b	11-1906
1188	A-4a	21841	3-1903	A-4b	1-1906	1195	A-4a	21934	4-1903	A-4b	5-1906
1189	A-4a	21878	3-1903	A-4b	10-1906	1196	A-4a	22136	5-1903	A-4b	11-1906
1190	A-4a	21880	3-1903	A-4b	12-1906	1197	A-4a	20437	5-1902	A-4b	4-1907
1191	A-4a	21881	3-1903	A-4b	6-1907	1198	A-4a	20438	5-1902	A-4b	11-1906
1192	A-4a	21887	3-1903	A-4b	2-1909	1199	A-4a	20450	5-1902	A-4b	9-1907
1193	A-4a	21912	3-1903	A-4b	9-1906	1200	A-4a	20451	5-1902	A-4b	5-1907

Disposition

1190, 1191, 1194 & 1197 scrapped 8-1935

1195—Sold, E. I. duPont de Nemours & Co., 3-1941

1198 Scrapped 2-1936 and 1199 scrapped 1-1936

1201	195	A-1a(W)	P&R		3-1879	?	35"	31200	Sc.	12-1903
1202	478	A-2b	Baldwin	3773	9-1875	14x22"	44"	56000	Sold	
		Central Iron & Steel Co. #3, 10-1902								
1203	485	A-2b	Baldwin	3936	7-1876	Sc.	4-1905			

The above A-2b locomotives were changed to Unclassified when 1216-1230 and 1231-1233 were reclassified as A-2b and A-2c respectively.

	A-2a	14x22"	44"	120#	58000	58000	9995#	
	A-2b,c	14x22"	44"	145#	60000	60000	12080#	Nos. 1216-1233
1204	267	P&R			3-1883			Sc. 6-1914
1205	67	P&R			4-1883			4-1917
1206	71	P&R			4-1883			10-1910

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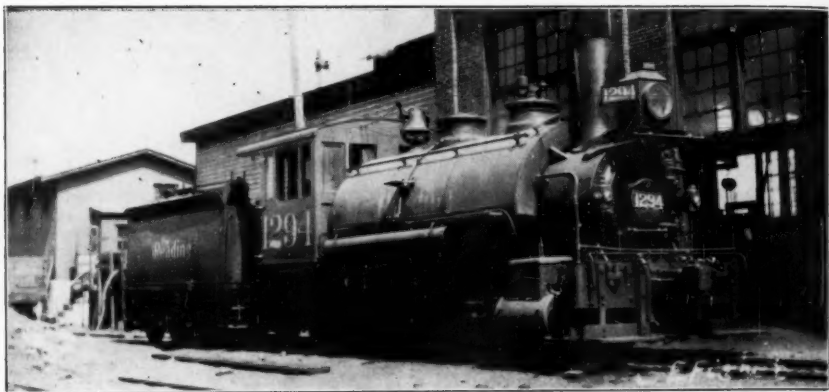
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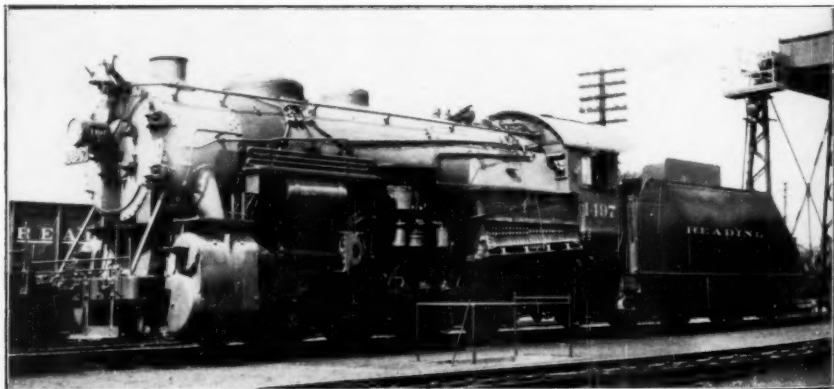
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—Courtesy of C. E. Fisher.

Reading #1294—3-3a, Reading Shops, 1886, at Camden, N. J.



Reading #1497—E-5sa, Baldwin, 1924, at Rutherford, Pa.

1207	283	P&R		6-1883	Sold—Collieries Sup. & Equip Co.				
1208	59	P&R		6-1883		Sc.		8-1915	
1209	61	P&R		6-1883				4-1916	
1210	74	P&R		8-1884				6-1917	
1211	90	P&R		8-1884	Sold United Gas Imp. Co.			2-1918	
1212	150	P&R		9-1884		Sc.		4-1905	
1213	151	P&R		9-1884		Sc.		7-1912	
1214	85	P&R		10-1884		Sold		3-1905	
1215	86	P&R		10-1884		Sc.		3-1933	
1216	545	Baldwin	10519	12-1889				6-1917	
1217	546	Baldwin	10517	12-1889				2-1925	
1218	547	Baldwin	10547	1-1890	Sold—Camden Forge Co.,			5-1917	
1219	548	Baldwin	10548	1-1890	Sold—Reading Iron Co.,			6-1912	
1220	549	Baldwin	10650	2-1890		Sc.		8-1929	
1221	544	Baldwin	10694	2-1890	Sold—Reading Iron Co.,			5-1914	
1222	550	Baldwin	10645	2-1890	Sold—Texas Co., #6,			10-1912	
1223	551	Baldwin	10655	2-1890	Sold—Temple Iron Co.,			4-1908	
1224	552	Baldwin	10693	2-1890		Sc.		9-1915	
1225	553	Baldwin	10696	2-1890				12-1911	
1226	624	Baldwin	12750	6-1892				4-1917	
1227	625	Baldwin	12751	6-1892				8-1927	
1228	626	Baldwin	12757	6-1892				11-1915	
1229	627	Baldwin	12760	6-1892				8-1912	
1230	628	Baldwin	12761	6-1892	Sold—Reading Iron Co.,			5-1914	
1231	2	Baldwin	14917	6-1896		Sc.		9-1923	
1232	3	Baldwin	14918	6-1896	Sold—Port Reading Creosoting Plant, 9-1930				
1233	56	Baldwin	14919	6-1896	Sold—U. S. Signal Corps, Hampton, Va., 10-1917				

Nos. 1216-1230 reclassified A-2b prior to 11-1903
 Nos. 1231-1233 reclassified A-2c prior to 11-1903

A-3a	11x16"	36"	—	33000	33000	—			
A-3b	11x16"	36"	110#	41000	41000	5030#			
A-3b	11x16"	36"	120#	38000	38000	5485#	Nos. 1234 & 1236		
1234	446	A-3b	Baldwin	3490	11-1873			Sc.	6-1903
1235	460	A-3a	Baldwin	2044	12-1869				7-1903
1236	473	A-3b	Baldwin	3509	11-1873				11-1905
1237	486	A-3b	Baldwin	3941	7-1876				Sold D. Gring 12-1902, resold Newport & Sherman's Valley R. R.
1238	1058	A-3b	Baldwin	4449	10-1878			Sc.	4-1905
1239	1059	A-3b	Baldwin	3115	1-1873			Sc.	4-1905

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1240	Uncl	W&N	#2	Baldwin	1959	9-1869	14x22"	48"	56000	Sold	5-1900
1240	A-4a(W)			Baldwin	20452	5-1902	Reclassified	A-4b			5-1907
1241	Uncl	W&N	#3	Baldwin	1993	10-1869	14x22"	48"	56000	Sc.	3-1907
1242	Uncl	W&N	#4	Baldwin	1680	12-1867	14x22"	48"	56000		6-1909
1243	Uncl	W&N	#5	Baldwin	—	1869	14x22"	48"	56000		3-1905
1244	Uncl	W&N	#8	Baldwin	—	1873	15x24"	48"	63000		9-1906
1245	Uncl	W&N	#1	Baldwin	9842	3-1889	18x24"	50"	85000		6-1914

A-4a(W)—All built by Baldwin

1246	20453	5-1902	A-4b	5-1907	1249	20484	5-1902	A-4b	11-1907
1247	20454	5-1902	A-4b	12-1907	1250	20507	5-1902	A-4b	3-1907
1248	20455	5-1902	A-4b	1-1907					

Nos. 1246, 1247 and 1250 all retired 8-1935

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1251	363	Uncl	0-6-0T Baldwin	2741	1872	15x22"	46"	70000	Sc. 12-1910
1251	—	B-4a(W)	0-6-0T P&R		1918	20x24"	50"	120000	
		B-1a	16x18" 43"	120#	64000	64000	10930#		
		B-1a(a)	16x18" 43"	120#	55000	55000	10930#		
		B-1b	16x18" 43"	145#	67900	67900	13210#		
1252	258	B-1a	P&R	11-1869				Sc.	9-1906
1253	276	B-1a	P&R	5-1870					2-1910
1254	281	B-1a(a)	P&R	6-1870	Sold—D. Gring,				12-1902
1255	293	B-1a(a)	P&R	9-1870				Sc.	4-1905
1256	334	B-1a(a)	P&R	10-1871					2-1910
1257	335	B-1a	P&R	11-1871					3-1907
1258	341	B-1a(a)	P&R	2-1872					9-1906
1259	342	B-1a	P&R	3-1872					3-1910
1260	10	B-1a	P&R	9-1872					10-1911
1261	109	B-1a	P&R	10-1872				Sold	9-1905
1262	39	B-1a	P&R	4-1874				Sc.	11-1910
1263	17	B-1a(a)	P&R	3-1874					3-1905
1264	47	B-1b	P&R*	11-1887					4-1916
1265	326	B-1a	P&R	7-1871					10-1912
#1264 reclassified B-2d and B-1a and B-1b.									

		B-2a(W)	16x18" 43"	120#	61600	61600	10930#		
		B-2b(W)	16x18" 43"	120#	65700	65700	10930#		
		B-2c(W)	16x18" 43"	140#	69000	69000	12750#		
		B-2e	16x18" 42¾"	145#	77600	77600	13285		
1266	42	B-2a	P&R	7-1878				Sc.	6-1909
1267	70	B-2a	P&R	10-1878					12-1911
1268	104	B-2a	P&R	11-1878					8-1911
1269	4	B-2a	P&R	8-1879					3-1907
1270	7	B-2a	P&R	8-1879	P&R* 10-1907		B-2e	Sc.	4-1923
1271	8	B-2c	P&R*	—				Sc.	1-1921
1272	120	B-2a	P&R	6-1880					2-1910
1273	54	B-2a	P&R	11-1880					2-1910
1274	52	B-2a	P&R	8-1881					4-1905
1275	79	B-2a	P&R	9-1881	Sold—Poulterer & Co.				7-1902
1276	68	B-2a	P&R	11-1881				Sc.	6-1909
1277	172	B-2b	P&R	11-1881	P&R* 11-1907		B-2e	Sc.	7-1920
1278	64	B-2a	P&R	6-1882				Sc.	10-1911
1279	117	B-2a	P&R	7-1882					5-1913
1280	116	B-2a	P&R	8-1882					1-1911
1281	284	B-2a	P&R	1882-3					6-1909
1282	103	B-2a	P&R	4-1883					3-1907
1283	221	B-2a	P&R	9-1883	Sold P&R C & I Co.				1-1911
1284	111	B-2b	P&R	5-1883				Sc.	3-1911
1285	121	B-2b	P&R	5-1883	P&R* 12-1907		B-2e	Sc.	1-1921
1286	299	B-2a	P&R	6-1883				Sc.	1-1907
1287	303	B-2a	P&R	7-1883					10-1911
1288	305	B-2a	P&R	8-1883					2-1912
1289	318	B-2a	P&R	8-1883					1-1910
1290	451	B-2a	P&R	9-1883					1-1913
1291	106	B-2a	P&R	9-1883					1-1907
1292	437	B-2a	P&R	10-1883					10-1912

B-3a	16x22" 44"	130#	74300	74300	14145#
B-5a(W)	20x24" 50"	145#	103000	103000	23665#
B-5b(W)	20x24" 50"	180#	121000	121000	29375#

1293	199	B-3a	P&R	10-1886	Sc.	9-1930
1294	445	B-3a	P&R	11-1886		11-1921
1295	463	B-3a	P&R	11-1886		1-1913
1296	470	B-3a	P&R	11-1886		1-1910
1297	629	B-5a	Baldwin	12763		7-1933
1298	630	B-5a	Baldwin	12764		4-1930
1299	631	B-5a	Baldwin	12769		8-1930
1300	632	B-5a	Baldwin	12770		6-1927
1301	633	B-5a	Baldwin	12781		6-1924
1302	457	B-5b	Baldwin	16617		2-1926
1303	461	B-5b	Baldwin	16618		7-1929
1304	464	B-5b	Baldwin	16619		11-1932
1305	474	B-5b	Baldwin	16620		
1306	475	B-5b	Baldwin	16621		

Unclassified

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1307	W&N	#7	Baldwin	—	?	?
1308	W&N	#9	P. W. & B. R. R.	1885	17x24"	50"
1309	W&N	#6	Baldwin	1887	17x24"	50"

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1310	W&N	#29	Baldwin	3670	1874	9x15"	36"	24000	4-1904
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B-6a 20x24" 50½" 200# 124900 124900 32315#

All built by Baldwin

1311	22448	7-1903		1314	22501	7-1903	Sold E. I. duPt.
1312	22455	7-1903			de N. & Co.,	3-1944	
1313	22463	7-1903	Sc.	6-1929	1315	22556	7-1903

B-8a(W) 20x26" 50" 200# 154125 154125 35360#

All built by Baldwin

1316	30699	4-1907		1318	30936	5-1907
1317	30700	4-1907				

B-7a(W) 20x28" 55" 200# 162100 162100 34620

All built by Baldwin

1321	27320	1-1906		1334	27645	3-1906
1322	27321	1-1906		1335	27662	3-1906
1323	27322	1-1906		1336	27762	3-1906
1324	27354	1-1906		1337	31055	6-1907
1325	27355	1-1906		1338	31071	6-1907
1326	27356	1-1906		1339	31072	6-1907
1327	27548	2-1907		1340	31101	6-1907
1328	27549	2-1907		1341	31131	6-1907
1329	27572	2-1907		1342	31205	7-1907
1330	27573	2-1907		1343	31206	7-1907
1331	27581	2-1907		1344	31225	7-1907
1332	27589	2-1907		1345	31226	7-1907
1333	27762	2-1907		1346	31315	7-1907

Built in Reading Shops

1347-1348	12-1911		1349-1350	1-1912
1351	1-1912		1352-1356	2-1913

Nos. 1351-1360 0-8-0 E-3a renumbered 1400-1409 will be listed in the 1400 series.

B-8b(W) 20x26" 50" 210# 156000 156000 37150#
All built in Reading Shops

1393-1396
1398-1399

8-1921
8-1913

1397

9-1921

				0-8-0					
		E-1a	18x22" 43"	120#	79800	79800	16910#		
		E-1b	18x22" 43"	120#	79800	79800	16910#		
		E-1c	18x22" 43"	145#	83200	83200	20430#		
		E-2a(W)	18x22" 43"	145#	94000	94000	20430#		
		E-2b(W)	18x22" 43"	145#	94000	94000	20430#		
		E-3a(W)	21x28" 55"	205#	179700	179700	39120#		
		E-3b(W)	21x28" 55"	205#	177710	177710	39120#		
		E-4a(W)	22x26" 55½"	180#	155600	155600	34690#		
1400	1351	E-3a	Baldwin 26143	8-1905	P&R*	5-1915	E-3b		
1401	213	E-1a	PR*	4-1869	Sold—Poulterer & Co.,			4-1902	
1401	1352	E-3a	Baldwin 26150	8-1905	P&R*	11-1915	E-3b		
1402	204	E-1a	P&R	11-1868			Sc.	3-1905	
1402	1353	E-3a	Baldwin 26187	8-1905	P&R*	8-1917	E-3b	Sc.	2-1937
1403	201	E-1a	P&R	11-1868			Sc.	4-1905	
1403	1354	E-3a	Baldwin 26214	8-1905	P&R*	8-1915	E-3b	Sc.	10-1940
1404	225	E-1a	P&R*	5-1869			Sc.	3-1905	
1404	1355	E-3a	Baldwin 26298	8-1905	P&R*	8-1915	E-3b	Sc.	10-1940
1405	243	E-1a	P&R*	7-1869			Sc.	1-1903	
1405	1356	E-3a	Baldwin 26306	8-1905	P&R*	7-1915	E-3b	Sc.	2-1937
1406	247	E-1a	P&R*	8-1869			Sc.	10-1902	
1406	1357	E-3a	Baldwin 26307	8-1905	P&R*	9-1916	E-3b		
1407	256	E-1a	P&R*	10-1869			Sc.	4-1905	
1407	1358	E-3a	Baldwin 26308	8-1905	P&R*	2-1916	E-3b		
1408	257	E-1a	P&R*	11-1869			Sc.	2-1911	
1408	1359	E-3a	Baldwin 26328	9-1905	P&R*	7-1916	E-3b		
1409	262	E-1a	P&R*	1-1870			Sc.	3-1911	
1409	1360	E-3a	Baldwin 26343	9-1905	P&R*	5-1916	E-3b	Sc.	10-1940
1410	266	E-1a	P&R*	3-1870			Sc.	3-1905	
1410	896	E-4a	Baldwin 13029	11-1892					
1411	273	E-1a	P&R*	5-1870					
1411	891	E-4a	Baldwin 13008	10-1892					
1412	271	E-1a	P&R*	5-1870					
1412	889	E-4a	Baldwin 13000	10-1892					
1413	272	E-1a	P&R*	5-1870					
1413	890	E-4a	Baldwin 13007	10-1892					
1414	286	E-1a	P&R*	8-1870					
1414	897	E-4a	Baldwin 13032	11-1892					
1415	290	E-1a	P&R*	9-1870					
1415	895	E-4a	Baldwin 13023	11-1892					
1416	291	E-1a	P&R*	9-1870					
1416	894	E-4a	Baldwin 13028	11-1892					
1417	294	E-1a	P&R*	10-1870					
1417	898	E-4a	Baldwin 13069	12-1892					
1418	297	E-1a	P&R*	11-1870					
1418	900	E-4a	Baldwin 13088	12-1892					
1419	22	E-1a	P&R*	1-1871					
1419	903	E-4a	Baldwin 13127	12-1892					
1420	36	E-1a	P&R*	4-1871					
1420	907	E-4a	Baldwin 13144	1-1893					
1421	346	E-1a	P&R*	—					
1421	892	E-4a	Baldwin 13012	11-1892					
1422	34	E-1b	P&R	11-1873					
1422	899	E-4a	Baldwin 13070	12-1892					

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—Courtesy of the Reading Co.

Reading #1616—I-8s, Reading Shops, 1914.



Reading #1667—I-9sa, Baldwin, 1919, at St. Clair, Pa.

1423	108	E-1b	P&R		11-1873				3-1911
1423	888	E-4a	Baldwin	12999	10-1892				
1424	21	E-1b	P&R		7-1875				10-1906
1424	902	E-4a	Baldwin	13107	12-1892				
1425	30	E-1a	P&R		8-1875	11-1911	Changed to E-1b		
1425	906	E-4a	Baldwin	13143	1-1893				
1426	130	E-1a	P&R		8-1875				2-1903
1426	930	E-4a	Baldwin	13345	4-1893				
1427	27	E-1b	P&R		8-1875				11-1911
1427	915	E-4a	Baldwin	13200	2-1893				6-1936
1428	253	E-1b	P&R*		—				7-1912
1428	936	E-4a	Baldwin	15042	9-1896				
1429	259	E-1c	P&R*		—				10-1910
1429	893	E-4a	Baldwin	13019	11-1892				
1430	29	E-1c	P&R*		9-1888				1-1927
1431	41	E-1c	P&R*		—				10-1906
1431	924	E-4a	Baldwin	13302	3-1893				1-1933
1432	33	E-1c	P&R*		—				2-1912
1432	937	E-4a	Baldwin	15043	9-1896				6-1936
1433	50	E-2a	P&R		3-1878				6-1911
1433	901	E-4a	Baldwin	13098	12-1892				
1434	65	E-2a	P&R		5-1879	Sold—Poulterer & Co.,			8-1902
1434	921	E-4a	Baldwin	13234	2-1893				
1435	25	E-2b	P&R*		2-1892			Sc.	3-1917
1436	129	E-2b	P&R*		—				8-1911
1436	926	E-4a	Baldwin	13317	3-1893				
1437	279	E-2b	P&R*		—				3-1912
1437	911	E-4a	Baldwin	13178	1-1893				6-1936
1438	295	E-2b	P&R*		—				8-1912
1439	105	E-2b	P&R*		—				3-1913
1440	288	E-2b	P&R*		—			Sc.	3-1907
1441	280	E-2b	P&R*		—				10-1914
1442	235	E-2b	P&R*		—				4-1912
1443	210	E-2b	P&R*		—				8-1906
1444	260	E-2b	P&R*		9-1892				2-1921
1445	277	E-2b	P&R*		—				3-1912
1446	80	E-2b	P&R*		—				3-1914
1447	215	E-2b	P&R*		—				2-1915

Class E-4a rebuilt from class I-4d.

1448	177	G-1a	0-10-0	P&R	3-1866	20x26"	42¾"	88700	Sc.	6-1911
1449	93	G-2a(W)	0-10-0	P&R	11-1885	20x26"	42¾"	107000		5-1912
1450	403	N-1a	2-6-0	Baldwin	3413	9-1873	17x22"	48"	85400	5-1911
1451	404	N-1a	2-6-0	Baldwin	3452	10-1873				6-1909
1451		B-9a(W)	23x28"	55½"	185#	169800	169800	41695		
1452	623	B-9a	P&R		11-1917					
1452		Uncl(W)	P&R*		1900	2-6-0	12&20x24"	61½"	113400	
1452		B-9a	P&R		12-1917		Re. 528, 3-1917			
1453	19	Uncl	Baldwin	12611	4-1922	2-6-0	18x24"	54"	94200	
1453		B-9a	P&R		12-1917		Sold 1-1914			
1454	1208	N-2a	Rogers	4221	11-1889	2-6-0	19x24"	54"	110000	
1454		B-9a	P&R		1-1918					4-1912
1455	1209	N-2a	Rogers	4222	11-1889				Sc.	11-1911
1455		B-9a	P&R		1-1918					

1456	1210	N-2a	Rogers	4287	5-1890				10-1912
1456		B-9a	P&R		1-1918				
1457	1211	N-2a	Rogers	4288	5-1890				2-1911
1457		B-9a	P&R		2-1918				
1458	1212	N-3a	Baldwin	11089	8-1890	2-6-0	19x26"	54"	110600 Sc.
1458		B-9a	P&R		2-1918				2-1915
1459	1213	N-3a	Baldwin	11093	8-1890				3-1912
1459		B-9a	P&R		3-1918				
1460		Uncl	Baldwin	12806	7-1892	2-6-0	18x24"	54"	94200 Sc
1460		Ex	W.V.R.R. "A. F. Baker"		3-1918				6-1916
1461		B-9a	P&R		12-1916				
1462-1464		B-9a	P&R		1-1917				
1465		B-9a	P&R		2-1917				

B-9b(W) 23x28" 55½" 185# 175250 175250 41965#

1466-1468	B-9b	P&R	3-1917
1469	B-9b	P&R	4-1917
1470	B-9b	P&R	5-1917

All of the above were rebuilt, reclassified B-9a, 1924-6

E-5sa(W) 26x32" 55½" 215# 280610 280610 71250#

All built by Baldwin

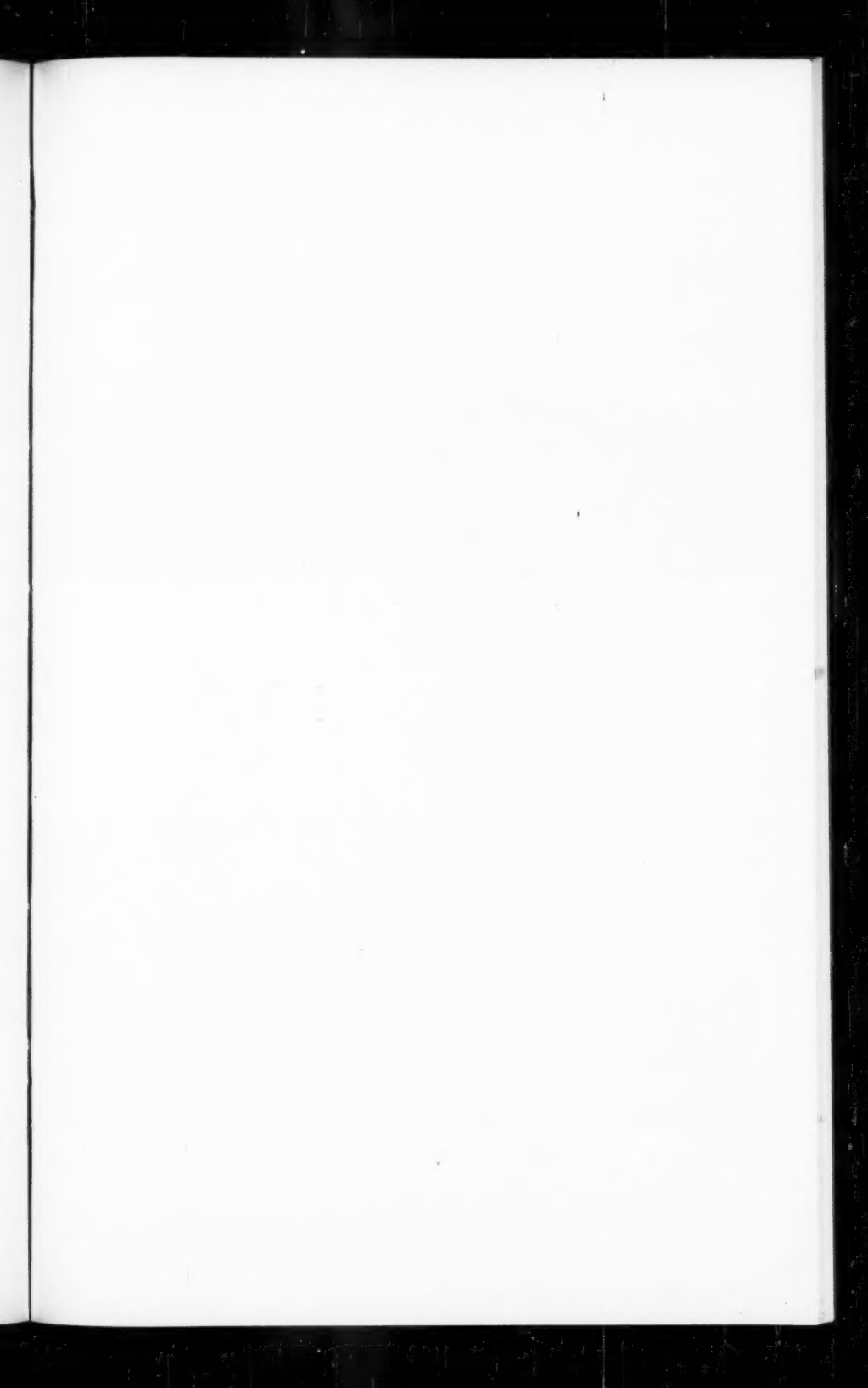
1490	58458	6-1925	1495	57852	7-1924
1491	58459	6-1925	1496	57853	7-1924
1492	58460	6-1925	1497	57854	7-1924
1493	58461	6-1925	1498	57932	7-1924
1494	58462	6-1925	1499	57933	7-1924

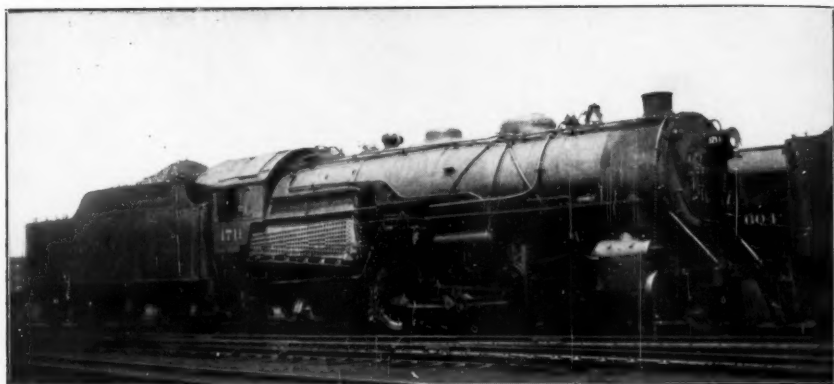
2-8-0

1-8a(W)	22½x30"	61½"	210#	203975	226250	44080#
1-8b(W)	23x30"	61½"	210#	211150	235650	46060#
1-8c(W)	23x30"	61½"	210#	221837	246050	46060#
1-8sb	23x30"	61½"	210#	211150	235650	46060#
1-8sd	23¾x30"	55½"	210#	208275	231950	54425#

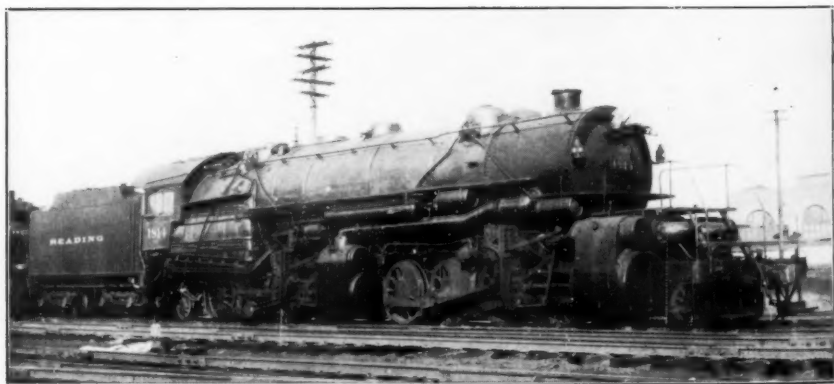
Built by Baldwin

1501	I-8a	26325	8-1905	5-1941	1534	I-8a	26836	11-1905	10-1940
1502	I-8a	26341	9-1905	10-1940	1535	I-8a	26889	11-1905	sb-1919
1503	I-8a	26357	9-1905	sb-1930	1536	I-8a	26898	11-1905	5-1941
1504	I-8a	26358	9-1905	sb-1919	1537	I-8a	26919	11-1905	b-1915
1505	I-8a	26359	9-1905	10-1940	1538	I-8a	26937	11-1905	sb-1927
1506	I-8a	26360	9-1905	10-1940	1539	I-8a	26938	11-1905	5-1941
1507	I-8a	26385	9-1905	b-1915	1540	I-8a	26954	12-1905	sb-1927
1508	I-8a	26393	9-1905	5-1941	1541	I-8a	26955	12-1905	sb-1930
1509	I-8a	26400	9-1905	5-1941	1542	I-8a	26963	11-1905	5-1941
1510	I-8a	26401	9-1905	sb-1930	1543	I-8a	27012	12-1905	10-1940
1511	I-8a	26413	9-1905	5-1941	1544	I-8a	27013	12-1905	b-1915
1512	I-8a	26418	9-1905	5-1941	1545	I-8a	27014	12-1905	sd-1920
1513	I-8a	26438	9-1905	b-1917	1546	I-8a	27015	12-1905	sb-1920
1514	I-8a	26439	9-1905	5-1941	1547	I-8a	27029	12-1905	5-1941
1515	I-8a	26455	9-1905	sb-1930	1548	I-8a	27030	12-1905	sb-1927
1516	I-8a	26470	9-1905	sb-1927	1549	I-8a	27031	12-1905	5-1941
1517	I-8a	26471	9-1905	sb-1928	1550	I-8a	27032	12-1905	sb-1936
1518	I-8a	26486	9-1905	sb-1916	1551	I-8a	27043	12-1905	sb-1920
1519	I-8a	26487	9-1905	sb-1916	1552	I-8a	27044	12-1905	b-1914
1520	I-8a	26498	9-1905	sb-1919	1553	I-8a	27045	12-1905	sb-1930





Reading #1711—M-1sa, Baldwin, 1915, at Reading, Pa.



Reading #1814—N-1sd, Reading Shops, 1918, at St. Clair, Pa.

1521	1-8a	26502	9-1905	sb-1919	1554	1-8a	27064	12-1905	b-1915
1522	1-8a	26526	10-1905	sb-1919	1555	1-8a	27065	12-1905	sb-1915
1523	1-8a	26527	10-1905	5-1941	1556	1-8a	27080	12-1905	5-1941
1524	1-8a	26549	10-1905	sb-1935	1557	1-8a	27081	12-1905	sb-1927
1525	1-8a	26569	10-1905	sb-1929	1558	1-8a	27108	12-1905	sb-1930
1526	1-8a	26580	10-1905	10-1940	1559	1-8a	27129	12-1905	sb-1920
1527	1-8a	26602	10-1905	5-1941	1560	1-8a	27145	12-1905	sb-1920
1528	1-8a	26603	10-1905	b-1914	1561	1-8a	27146	12-1905	sb-1919
1529	1-8a	26615	10-1905	sd-1918	1562	1-8a	27169	12-1905	sb-1914
1530	1-8a	26634	10-1905	5-1941	1563	1-8a	27170	12-1905	sb-1931
1531	1-8a	26713	10-1905	b-1917	1564	1-8a	27195	12-1905	sb-1920
1532	1-8a	26732	10-1905	b-1915	1565	1-8a	27236	1-1906	5-1941
1533	1-8a	26789	11-1905	sd-1920					

The date at the extreme right, where month is given, is date engine was retired. When rebuilt and classification changed, the classification letters and year rebuilt are given in place of date of retirement. All of these engines are still in service.

Built in Reading Shops

1566-1569	1-8a	4-1910—1567 sb	1917, 1568 b	1914, 1569 sb	1914
1570-1578	1-8a	5-1910—1571 sb	1917, 1573 sb	1919, 1574 b	1914
		1575 sb	1917, 1576 sb	1927, 1577 b	1918
		1578 sb	1919, 1570 & 1572 Sc.	5-1941	
1579-1585	1-8a	6-1910—1579 sb	1920, 1582 sd	1919, 1583 sd	1918
		1584 sd	1916, 1585 b	1918, 1580 sc	5-1941
1586-1594	1-8b	11-1912—1587 sb	1917, 1588 sb	1919, 1589 sb	1919
		1593 sb	1919		
1595-1605	1-8b	12-1912—1597 sb	1917, 1599 sb	1919, 1604 sb	1919
1606-1610	1-8b	11-1913—1606 Sc.	3-1936	1600 1602 Sc.	2-1937
1611	1-8sb	12-1913—			
1612-1615	1-8b	1-1914—1612 sd	1916—all others changed to sb		
1616	1-8c	2-1914—changed to sd	5-1918		
1617	1-8c	6-1914—changed to sd	6-1918		
1-9sb(W) 25x32" 55½" 210# 257600 285000 64300#					

All built by Baldwin

1625	53989	11-1920	1638	54368	1-1921
1626	54023	11-1920	1639	54369	1-1921
1627	54128	11-1920	1640	54370	1-1921
1628	54129	11-1920	1641	54371	1-1921
1629	54176	12-1920	1642	54372	1-1921
1630	54177	12-1920	1643	54373	1-1921
1631	54178	12-1920	1644	54374	1-1921
1632	54179	12-1920	1645	54375	1-1921
1633	54180	12-1920	1646	54376	1-1921
1634	54181	12-1920	1647	54510	1-1921
1635	54182	12-1920	1648	54545	2-1921
1636	54327	1-1921	1649	54487	1-1921
1637	54328	1-1921			

1-9sa(W) 25x32" 55½" 210# 251920 281700 64300#

All Built by Baldwin

1650	49351	7-1918	1661	50992	12-1918
1651	49401	7-1918	1662	51084	1-1919
1652	49475	8-1918	1663	51172	1-1919
1653	49635	8-1918	1664	51173	1-1919
1654	49636	8-1918	1665	51174	1-1919

1655	49662	8-1918	1666	51194	2-1919
1656	49733	9-1918	1667	51195	2-1919
1657	49825	9-1918	1668	51345	2-1919
1658	49859	9-1918	1669	51485	3-1919
1659	50131	10-1918			
1660	50878	12-1918			

1-9sb(W) 25x32" 55½" 210# 257600 285000 64300#

All Built by Baldwin

1670	52396	10-1919	1685	52556	11-1919
1671	52397	10-1919	1686	52557	11-1919
1672	52398	10-1919	1687	52579	12-1919
1673	52445	10-1919	1688	52580	12-1919
1674	52446	10-1919	1689	52581	12-1919
1675	52447	11-1919	1690	52582	12-1919
1676	52494	11-1919	1691	52606	12-1919
1677	52495	11-1919	1692	52607	12-1919
1678	52496	11-1919	1693	52608	12-1919
1679	52497	11-1919	1694	52609	12-1919
1680	52498	11-1919	1695	52610	12-1919
1681	52521	11-1919	1696	52611	12-1919
1682	52522	11-1919	1697	52612	12-1919
1683	52523	11-1919	1698	52613	12-1919
1684	52524	11-1919	1699	52614	12-1919

2-8-2

M-1sa(W) 24x32" 61½" 215# 249700 334425 54700#
as of 12-1944 25x32" 61½" 225# 249700 334425 62200#

All built by Baldwin (except #1700)

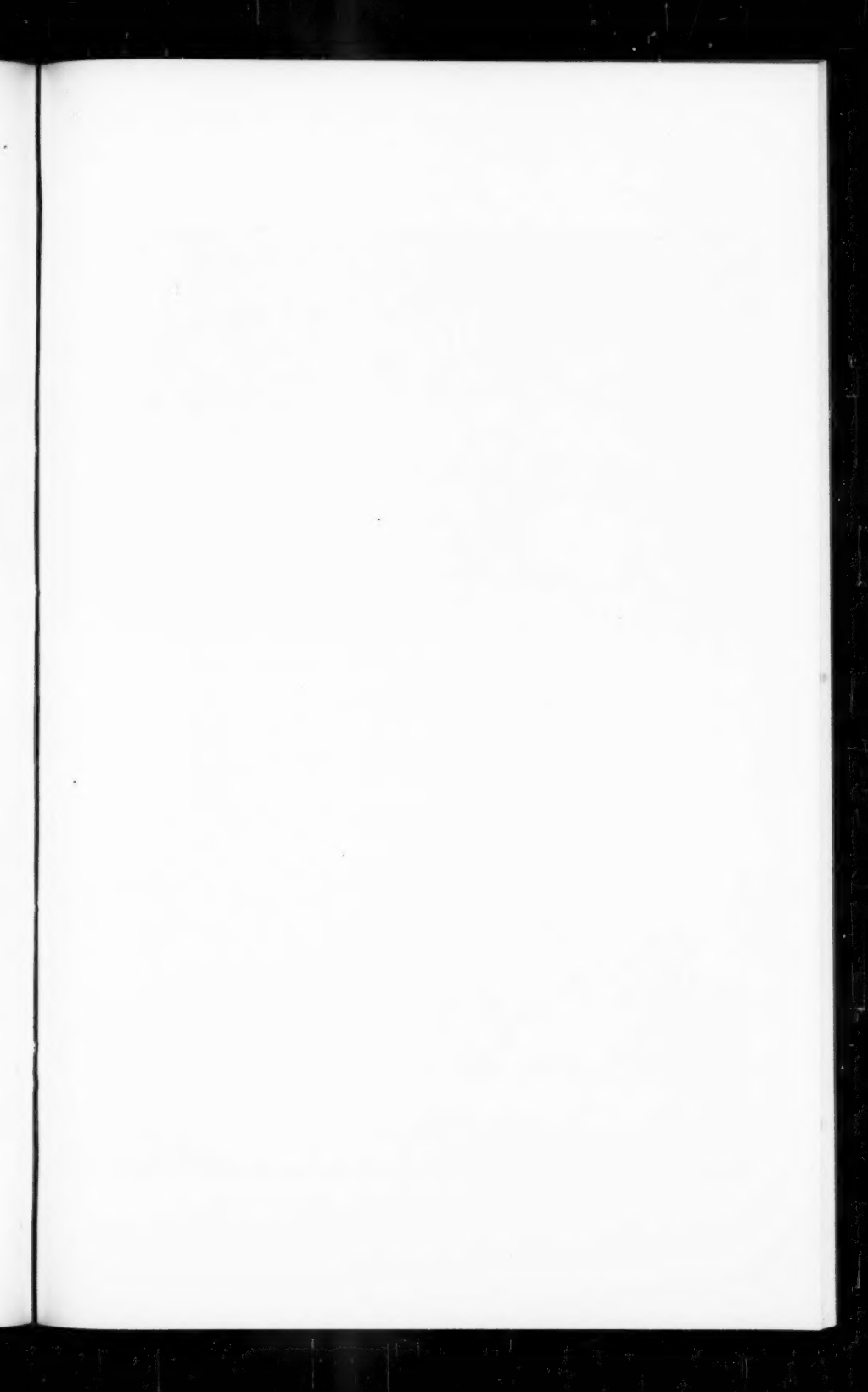
1700	P&R	9-1912	1714	42680	12-1915
1701	41029	12-1913	1715	42681	12-1915
1702	41030	12-1913	1716	42682	12-1915
1703	41052	12-1913	1717	42683	12-1915
1704	41089	1-1914	1718	42684	12-1915
1705	41094	1-1914	1719	42685	12-1915
1706	41106	1-1914	1720	42686	12-1915
1707	42673	12-1915	1721	42728	12-1915
1708	42674	12-1915	1722	42729	12-1915
1709	42675	12-1915	1723	42730	12-1915
1710	42676	12-1915	1724	42731	12-1915
1711	42677	12-1915	1725	42732	12-1915
1712	42678	12-1915	1726	42733	12-1915
1713	42679	12-1915			

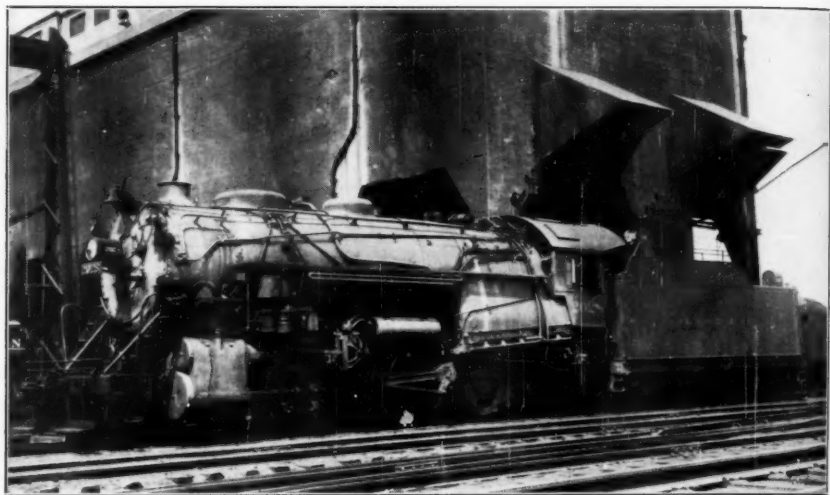
#1700 although classified the same as the others has 24x32" cyl. 225# pressure and T. E. 57320#

M-1sa(W) 25x32" 61½" 225# 249700 334425 62200#
M-1sb(W) 24x32" 55½" 215# 248734 332225 60690#

All built by Baldwin

1727-1729	42799-42801	1-1916
1730-1732	42823-42825	1-1916
1733-1735	42906-42908	2-1916
1736	42939	2-1916
1737-1738	44329-44330	11-1916
1739-1741	44443-44445	11-1916





Reading #2028—I-10sa, Baldwin, 1925, at Rutherford, Pa.



Reading #3003—K-1sa, reb. Reading Shops, 1929, at Rutherford, Pa.

1742-1743	44474-44475	11&12-1916
1744-1748	44577-44581	12-1916
1749-1751	44619-44621	12-1916
1752	44674	12-1916
1753-1755	44814-44816	1-1917
1756	44870	1-1917

Delivered as M-lsb locomotives, 1747-1756 were rebuilt to M-lsa between 6-1928 and 1-1929; 1727-1746 between 10-1941 and 12-1943.

2-8-8-2

N-lsa(W)	40&26x32"	55½"	210#	438800	478500	98400#
N-lsc(W)	40&26x32"	55½"	210#	435500	478500	98400#

All built by Baldwin

1800	N-lsa	44890	1-1917	1806	N-lsc	48941	6-1918
1801	N-lsa	45058	2-1917	1807	N-lsc	49088	6-1918
1802	N-lsa	45118	2-1917	1808	N-lsc	49238	7-1918
1803	N-lsa	45278	3-1917	1809	N-lsc	49349	7-1918
1804	N-lsa	45279	3-1917	1810	N-lsc	49487	8-1918
1805	N-lsa	45341	3-1917				

The above engines were rebuilt to 2-10-2 type, renumbered in the 3000's and will be found in their proper place.

N-lsb(W)	40&26x32"	55½"	210#	435500	478500	98400#
N-lsd(W)(4)	23x32"	55½"	215#	465430	500700	111400#

1811	N-lsc	49546	8-1918	1821	N-lsb	51715	4-1919
1812	N-lsc	49735	9-1918	1822	N-lsb	51769	5-1919
1813	N-lsc	50133	10-1918	1823	N-lsb	51827	5-1919
1814	N-lsc	50875	12-1918	1824	N-lsb	51905	6-1919
1815	N-lsc	50940	12-1918	1825	N-lsb	51939	6-1919
1816	N-lsb	51080	1-1919	1826	N-lsb	51975	6-1919
1817	N-lsb	51203	2-1919	1827	N-lsb	51993	6-1919
1818	N-lsb	51406	2-1919	1828	N-lsb	52073	7-1919
1819	N-lsb	51519	3-1919	1829	N-lsb	52095	7-1919
1820	N-lsb	51648	4-1919	1830	N-lsb	52238	7-1919

Save for #1827, all have been rebuilt to class N-lsd between 1930 and 1944, but trailers were removed 2-8-8-0 type, 10-1940 to 10-1944.

2-8-0

I-9sb(W)	25x32"	55½"	210#	257600	285000	64300#
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All built by Baldwin

1900	55357	3-1922
1901-1906	55405-55410	5-1922
1907-1910	55463-55466	6-1922
1911	55469	6-1922
1912	55472	6-1922
1913-1914	55504-55505	7-1922
1915-1920	55543-55548	8-1922
1921-1924	55618-55621	9-1922

I-10sa(W)	27x32"	61½"	220#	284190	314950	71000#
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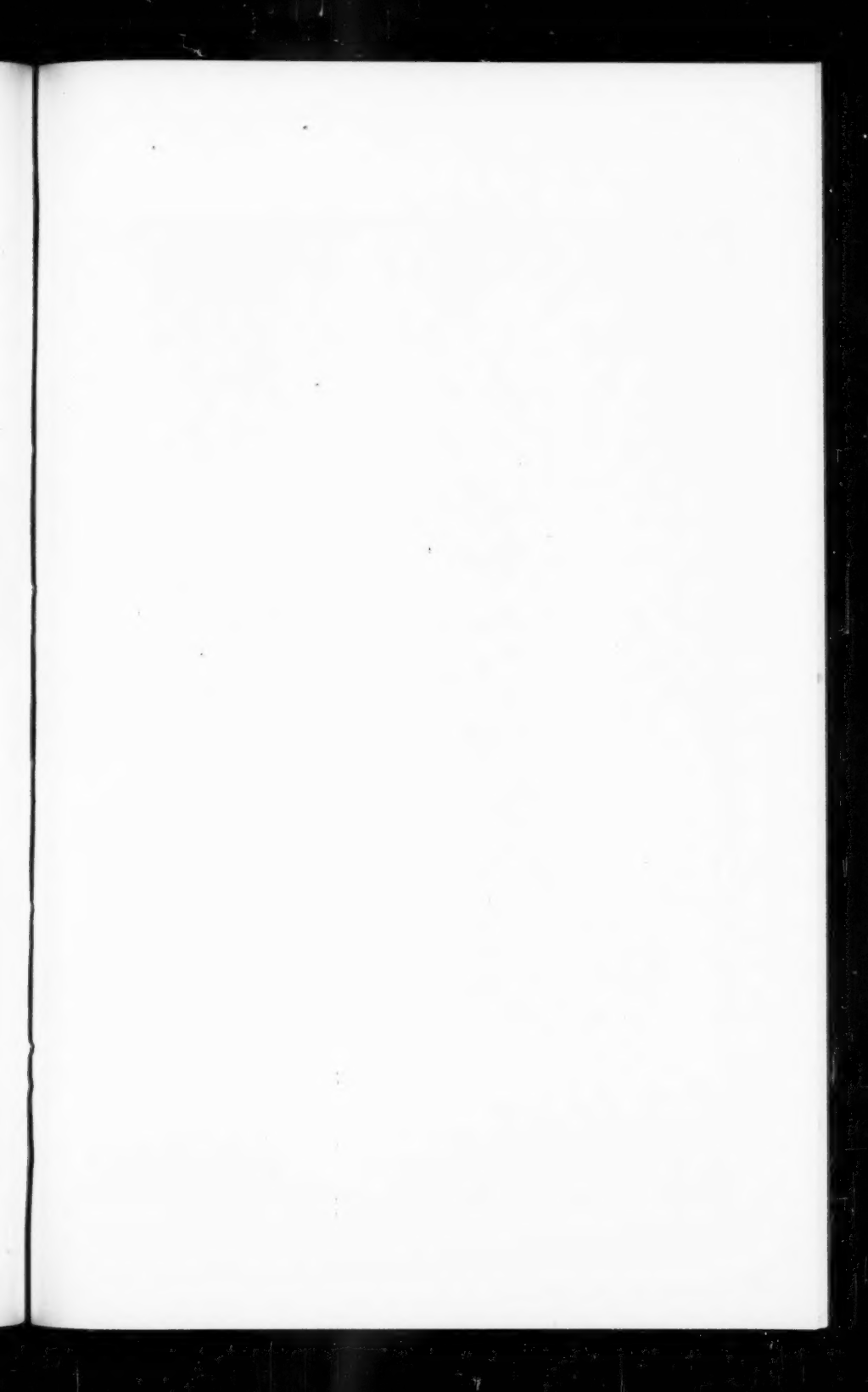
All built by Baldwin

2000-2008	57348-57356	10-1923
2009-2018	57507-57516	11-1923
2019-2023	57577-57581	12-1923

2024	57596	12-1923
2025-2027	58217-58219	2-1925
2028-2033	58258-58263	3-1925
2034-2039	58275-58280	3-1925
2040-2045	58325-58330	3-1925
2046-2047	58371-58372	5-1925
2048-2049	58382-58383	5-1925

2-10-2

	K-lsa(W3	30½x32"	61½"	220#	353050	439800	90500#	
	K-lsb(W)	30½x32"	61½"	225#	363900	451000	92570#	
	K-lsc(W)	30½x32"	61½"	220#	353050	439800	90500#	
3000	1801	K-lsa	RDG Co.*					3-1927
3001	1800	K-lsa	RDG Co.*					10-1928
3002	1802	K-lsa	RDG Co.*					12-1928
3003	1805	K-lsa	RDG Co.*					1-1929
3004	1806	K-lsa	RDG Co.*					3-1929
3005	1808	K-lsa	RDG Co.*					4-1929
3006	1807	K-lsa	RDG Co.*					5-1929
3007	1809	K-lsa	RDG Co.*					7-1929
3008	1803	K-lsa	RDG Co.*					9-1929
3009	1804	K-lsa	RDG Co.*					11-1929
3010	1810	K-lsc	RDG Co.*		6-1939	RDG*	K-lsa	7-1942
3011-3012		K-lsb	Baldwin		61617-61618			4-1931
3013-3015		K-lsb	Baldwin		61614-61626			5-1931
3016-3017		K-lsb	Baldwin		61638-61639			6-1931
3018		K-lsb	Baldwin		61640			7-1931
3019-3020		K-lsb	Baldwin		61650-61651			7-1931





Reading #118 on the "Crusader" between Philadelphia and New York. G-2-ss, Reading Shops, 1918. —Courtesy of the Reading Co.

Valve Gear and Type of Valves

Engines of all classes, other than those shown below, were equipped with Stephenson valve gear and slide valve cylinders.

All engines having Vauclain Compound cylinders were equipped with Stephenson gear and piston valves.

Engines 616 and 3010 were equipped with Caprotti gear and valves.

A number of the I-7 class engines were later equipped with Economy Steam Chests, a piston valve steam chest, which fitted on to the old slide valve cylinders.

The engines of the following classes had Walschaert Valve gear and piston valves, unless otherwise noted:

B-8a—Stephenson gear when built. Changed to Walschaert. Slide valves.

B-8b, B-9a, B-9b.

C-1a—(4-4-4)

D-8sd, D-11s.

E-3b, slide valves. E-5sa

All G classes (4-6-2)

Some I-2e and I-2f had Walschaert gear and slide valves. Others Stephenson.

I-6d, slide valves. I-8b, I-8sb, I-8c, I-8sd, I-9sa, I-9sb, M-10a, J-1a.

K (2-10-2) K-1sa, K-1sb.

L-3se, L-5se, L-7b, L-7sb, L-8se. (L-8d, slide, L-8se, L-10a, L-10b, L-10sb.

M (2-8-2) M-1a, M-1sa, M-1sb.

All N classes (2-8-8-2 and 2-8-8-0) N-1sa, N-1sb, N-1see, N-1sd.

P-2b, P-3d, P-4d, P-4e, P-4f. All slide valves.

All P-5 classes except a and b.

All P-6 and P-7 classes.

Q-1c and Q-1d. Slide valves.

All locomotives and classes noted with wide fireboxes have middle cabs except the following:

B-2-a

B-4-a

B-9-a, b

C-1-a (4-4-4)

D-11s

E-5-s-a

G-1-s-a, b

G-1-s-a-s

G-2-s-a

I-9-s-a, b

I-10-s-a

J-1-s-a

K-1-s-a, b, c

L-6-s-a

M-1-s-a, b

N-1-s-a, b, c, d

P-7-s-a, b

Q-1-a, b, c, d
 #100—Inspection 4-4-2
 #1452 Unclassified, renumbered 528 (?)

The Unclassified Locomotives

At the time the present classification system was put into effect, there were, beside the inspection engines, 20 locomotives whose design and specifications did not conform to any of the standard classes, and were designated as "Unclassified." They bore road numbers 7, 81, 89, 90, 91, 110, 111, 118, 232, 236, 316, 317, 484, 485, 486, 487, 488, 1251, 1452 and 1453. The inspection engines were numbered 101, 102 and 103. Shortly after this time, a new 4-4-0 inspection engine was built and placed on the unclassified list, and was renumbered 102, in 1913, to make room for the new 4-4-2 inspector, built in that year. Old Nos. 102 and 103 had since been scrapped and the latter was replaced by No. 116, which had been rebuilt as an inspector, and "unclassified," from C3-a.

Nos. 7, 316 and 317 were rebuilt and assigned standard classification. The other 17 remained on the unclassified list during the remainder of their time on the road.

In addition to the above there were No. 145 and the engines of the Catasauqua & Fogelsville R. R. and Wilmington & Northern R. R., which were not classified, neither were they placed on the original unclassified list at that time, although they later were so placed. The C. & F. engines were numbered 92, 93, 94, 95 and 96. The W. & N. engines were numbered 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 581, 582, 583, 584, 585, 586, 1021, 1022, 1241, 1242, 1243, 1244, 1245, 1307, 1308, 1309 and 1310. It is evident that these engines, with the exception of those that may have been scrapped in the meantime, were placed on the Unclassified List, at some time between April, 1900, and November, 1903.

Another group, consisting of a large number of engines, all from acquired lines, were definitely classified, as of April, 1900, and were subsequently declassified and placed on the unclassified list. Although the reason for this change is rather obscure, it appears that the engines in these classes, while generally similar, varied to the extent that they were not identical. To eliminate the condition of having dissimilar locomotives in the same class, or to eliminate from the classification system all engines of other than standard P. & R. design, such engines were unclassified, thereby limiting classification to locomotives whose origin was on the P. & R. Included in this group were the following:

Road No.	From Class
112 thru 115*	C2-a
116	C3-a (To Inspector)
120*	C4-a
142 thru 144*	C7-a
226 thru 229	D6-a
230	D6-b

522 thru 524*	H5-a
525 thru 526*	H6-a
527 thru 530*	H7-a
1202-1203*	A2-b
1234*	A3-b
1235*	A3-a
1236 thru 1239*	A3-b
1450-1451	N1-a

* Some may have been scrapped before de-classification took place.

No. 1460, received from the Williams Valley R. R., was placed on the Unclassified List, as were the two engines received from the Mt. Carmel & Natalie R. R., numbered 526 and 527 (the second engines to bear these numbers).

When the Reading took over the Bloomsburg & Sullivan R. R., on December 31, 1928, they acquired B. & S. engines numbered 5, 6 and 10, which carried their original numbers until they were sold, in June, 1929. These engines were never classified.

Abbreviations

It has been necessary in lists of this nature, to use some abbreviations and they are as follows:

* Rebuilt **Rebuilt and Renamed ***Renamed

Expl—Exploded Sc—Scrapped Ret—Retired

a—following the date indicates the date the locomotive was acquired by the P & R and used because the date of construction in most cases is unknown.

w—locomotive has a wide firebox.

ALCo	— American Locomotive Co., New York, N. Y.
BLW	— Baldwin Locomotive Works, Philadelphia, Pa.
B&SRR	— Bellefonte & Snow Shoe R. R.
CW&ERR	— Catawissa, Williamsport & Erie R. R.
DB&K	— Davenport, Bridges & Kirk, Cambridgeport, Mass.
E&H	— Eastwick & Harrison, Philadelphia, Pa.
EMC	— Electro-Motive Corp., La Grange, Ill.
H&PRR	— Harrisburg & Potomac R. R.
HB&Co.	— Hayward, Bartlett & Co., Baltimore, Md.
L&C	— Locks & Canals Co., Lowell, Mass.
LSRR	— Little Schuylkill R. R.
Lanc	— Lancaster, to distinguish between the Norris engines built at Philadelphia and Schenectady (Schen.), N. Y.
MHRR	— Mine Hill R. R.
Schen	— See Lanc. above
WVRR	— Williams Valley R. R.
W&DRR	— Williamstown & Delaware River R. R.
W&N	— Wilmington & Northern R. R.

New Books

"SLOW TRAIN TO YESTERDAY," by Archie Robertson, 189 pages, 7 $\frac{3}{4}$ x5, illustrated, bound in cloth, price \$3.00. Published by Houghton Mifflin Co., 2 Park St., Boston, Mass.

The author of this book was born and brought up in Louisville, Kentucky, a city that is not only a rail center but was a busy interurban center until the coming of the 'bus and automobile. He entered the newspaper field and he has been a teacher, publicity representative, and he has been in various Governmental departments—Agriculture, Commerce and U. S. Housing Authority. His travels have taken him over many of our short railroads and to some remote places and his book is a chronicle of these wanderings, together with his impressions of the people. We find him in New England, riding our Suncook Valley and the St. J. & L. C., we find him in Colorado riding the Denver & Salt Lake but his favorite little road appears to be the "Tweetsie"—the East Tennessee & Western North Carolina R. R.

Throughout it all the author has conveyed to the reader his impressions of these little lines, the men that run them and the people that ride them and the territory they serve. There is a good deal of humor and pathos throughout the entire narrative. The little book is well illustrated and the sketches will delight anyone.

These little railroads are rapidly disappearing from this land of ours and now, with the conclusion of this war they soon promise to be nothing more than a memory. The author should be commended in setting down his experiences in such an enchanting fashion, the only regret is that more could not have been included in this little book.

"RAILROAD AVENUE," by Freeman Hubbard, 374 pages, 9x6, illustrated, bound in cloth, price \$3.75. Published by Whittlesey House, McGraw-Hill Book Co., New York, N. Y.

Freeman Hubbard, for over fifteen years on the staff of Railroad Magazine as Editor and Research Editor needs no introduction to our membership. Son of a railroad man and having done some railroading along with his other work, he knows whereof he speaks.

Railroad Avenue is a book dealing with the best stories and legends of American Railroading. Here we find the story of Casey Jones; the wreck of old 97; the Johnstown flood; the great Hinckley fire; the last run on the Woodstock Railway and other chapters of equal interest. Some of these stories are better known than others and, as time has passed, the narrator has been tempted to include facts that perhaps were not so. In each and every instance the author has carefully followed through each story, sifting the facts from the supposed-to-be facts. It is quite evident that this was uppermost in the preparation of this work and for this painstaking research, he has our debt of gratitude. To those of us who love our pets, his chapter on "Raildogs" will have an especial appeal by the loyalty shown by these dumb beasts. But without being critical, there is one rather amusing error that the author has

made, and, I daresay he has heard from it already. In his narrative of the famous #999 on the New York Central & Hudson River R. R., he states that Mr. Daniels, the capable General Passenger Agent of that road, arranged with the Post Office Department to have that locomotive on the "Empire State Express" depicted on one of the stamps in the Columbian Exposition series, printed in 1893. Recalling my own stamp collecting days and, backed up by the publications of our own Post Office Department, it was not until the Pan-American issue of 1901, printed to commemorate that exposition in Buffalo, N. Y., that the "Empire State Express" adorned the 2c stamp of that issue and, the locomotive on that train appears to be the #938—not the #999. However, this error is only a trifle—the famous #999 adorned children's books, puzzles, toy trains without end—she had plenty of fame even if she never was depicted on one of our postage stamps.

There is another interesting chapter on the origin of various railroad emblems and another on railroad lingo that will be of interest to the reader. For anyone who wishes a truthful and interesting account of our better known railroad legends and stories, he should own a copy of this book. Mr. Hubbard deserves to be commended for his research, his presentation and capable narrative.

"THE ROLE OF TRANSPORTATION IN THE DEVELOPMENT OF VERMONT," by Col. William J. Wilgus, 104 pages, 10¾x8, illustrated with maps and charts, bound in cloth, price \$3.00. Published by the Vermont Historical Society, Montpelier, Vermont, limited edition.

To those that know and love our "Green Mountain State," this book will have great appeal. Vermont is the only New England state that does not touch the ocean, she is hemmed in by the Adirondack, White and Berkshire mountains and although the northern portion is a broad, level country, it is here that she touches Canada. Within her own borders, the Green Mountains run north and south and it is only through a limited number of gaps that one can go from east to west or vice versa. But for all that, Vermonters had access to Lake Champlain on the west, with a northern outlet flowing into the St. Lawrence River and its Wood Creek, to the south, flowing into the Hudson. On the east was the Connecticut River forming its eastern boundary. Such are the geographical handicaps and advantages of this State.

The author has made a very careful survey of the resources; population; its early form of transportation; steamboats, canals and turnpikes and railroads. He has also presented an account of the rival claims and the external influences.

Col. Wilgus, creator of the Grand Central Terminal in New York City has had a long and distinguished career as an engineer and railroad executive. He was also the organizer of the French railways for the reception and delivery of supplies for the American Expeditionary Forces in 1917-1919. He is the author of many transportation studies, one of his most recent is his "Railway Interrelations of the United States and Canada." He has not attempted to give in detail a complete his-

tory of transportation of this state, rather he has presented a study of the part that transportation has played in the shaping of Vermont. His maps, in visual form, are worth many lines of text and his work should be of great interest and value to the student of economics and history.

"STEELWAYS OF NEW ENGLAND," by Alvin F. Harlow, 461 pages, 8x5, illustrated, bound in cloth, price \$3.50. Published by Creative Age Press, Inc., New York, N. Y.

This is the first of a series of sixteen volumes, planned by the publishers, covering the history of our railroads and if those that follow are as interesting and done as well as the first of this series, they will be a valued addition in any library. Although this is the first attempt of the author in the railroad field, he has made valuable contributions on the express industry in his "Old Waybills."

In this volume the author has wisely spent no little time and research and devoted no little space in describing conditions in New England prior to the construction of the first railroads. In turn the earliest and the more important of our New England railroads are covered; the Boston & Lowell; Boston & Providence; Boston & Worcester; the Western; Boston & Maine; New York, New Haven & Hartford; New York & New England; the Old Colony; the Fitchburg; Vermont Central; the Concord; the Maine Central and the "Thin Gaugers." All are well covered in a delightful fashion and are not hampered with mechanical or financial details.

But it is in the subsequent chapters that the author has been at pains to record what New England and its men have contributed to the railroad industry. The first railroad in America, as we view a railroad today, was the horse-operated line at Quincy, Mass. Thirty-five years before Pullman a Massachusetts man designed a sleeping car; the Naugatuck R. R. operated a vestibule train in 1857; the first real large tunneling project was the Hoosac, started in 1855 and as for the New England "captains of industry" they were connected with the building and the completion of the first three transcontinental railways and several others besides.

It has taken a New Yorker to record in an interesting fashion for the lay man and those who are interested in railway history, a graphic account of our New England railways and her men. That he has done a fine job, no one can deny after reading this book. He deserves our praise and commendation and we are glad that he is in our midst. The book is a valuable addition to any railroad library.

In Memory of

JULIUS MURRAY BLANCHARD

Honorary Member

Librarian, The Traffic Club of Chicago, Chicago, Illinois
who died on November 20, 1942.

KENNETH W. CRABB

Annual Member

25 Lomond Road, Edinburgh, Scotland,
who died on October 15, 1944.

G. N. EDMONDSON

Annual Member

90 Bryant Ave., White Plains, N. Y.
who died on August 11, 1944.

W. B. HARRISON

Annual Member

4843 Dorchester Ave., Chicago, Ill.,
who died on December 15, 1944.

H. B. LYMAN

Annual Member

Southampton, Massachusetts,
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C. F. DENDY MARSHALL

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BENJAMIN NIELDS

Annual Member

10600 Quincy Ave., Cleveland, Ohio,
who died on February 26, 1945.

HENRY SHAPCOTE
Annual Member
Laurel Bank, South Brent, Devon, England,
who died on February 6, 1945.

E. H. ZIEBEL, Chairman
Chicago Chapter
Annual Member
Chicago, Illinois,
who died on May 30, 1945.

